ORDER NO. VRD9511M151

Service Manual

Video Cassette Recorder

Panasonic VHS

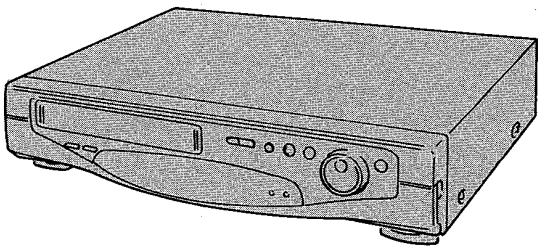
PAL/NTSC 4.43

Hi-Fi HQ

NV-HD650 A/EA

General Description
Adjustment Procedures
Block / Schematic Diagrams
Exploded Views / Parts List

K-MECHANISM



SPECIFICATIONS

ITEM	SPECIFICATION	
POWER	SOURCE: 240V AC 50/60Hz (NV-HD650A) 230V AC 50/60Hz (NV-HD650EA)	
	CONSUMPTION: 23 watts	
RECORDING SYSTEM	2 rotary heads, helical scanning system	
	PAL/NTSC 4.43	
TV TUNER SYSTEM	NV-HD650A	VHF I: CH0~CH5 (PAL B) VHF III: CH5A~CH12 (PAL B) UHF: CH21~CH69 (PAL G) 75Ω terminated
	NV-HD650EA	VHF I: CH1~CH3 (PAL B) VHF III: CH4~CH11 (PAL B) UHF: CH21~CH69 (PAL G) 75Ω terminated
RF OUT SYSTEM	NV-HD650A	UHF: CH37±6 (PAL B) 73±3dBμ, 75Ω terminated
	NV-HD650EA	VHF: CH2/3 (PAL B) 73±3dBμ, 75Ω terminated
VIDEO	HEADS: 4 rotary heads 1 pair for SP recording, playback and trick play (L-R heads) 1 pair for LP recording, playback and trick play (L′-R′ heads)	
	INPUT: VIDEO IN (AV1, 2) Connector (Phono type) 1.0Vp-p, 75Ω unbalanced	
	OUTPUT: VIDEO OUT Connector (Phono type) 1.0Vp-p, 75Ω unbalanced	

ITEM	SPECIFICATION
AUDIO	HEAD: 1 Stationary head (Normal Audio) 2 channels (Hi-Fi Sound-Stereo)
	INPUT: AUDIO IN (AV1, 2) Connector (Phono type) More than −10dBV (316mV), more than 47kΩ MICROPHONE JACK −70dBV
	OUTPUT: AUDIO OUT Connector (Phono type) −8dBV (400mV), less than 1kΩ
TAPE FORMAT	VHS Cassette tape (Tape width 12.7mm)
TAPE SPEED	SP: 23.39mm/s LP: 11.695mm/s Record/Playback Time: SP: 4 hours with 240min. type tape LP: 8 hours with 240min. type tape FF/REW Time: 2.5min. with 180min. type tape
OPERATING TEMPERATURE	5°C−40°C
OPERATING HUMIDITY	35%−80%
DIMENSIONS	430(W)×91(H)×312(D) mm
WEIGHT	4.6kg
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Infra-red Remote Controller 1 pc. AC Mains Lead 1 pc. Audio Cables

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service this model.

Section 1 presents you with technical know how for actual servicing and general information of features and controls, enabling you to become familiar with each function.

Section 2 presents to your mechanical and electrical adjustment information as well disassembly and replacement procedures.

In the case of very common information relating to other models like mechanical adjustments, please refer to the appropriate service manual.

Section 3, 4 contains block diagrams which provides you with information for checking and understanding each circuit. Schematic diagrams which give you detailed information such as waveforms, voltage data, function e.t.c. ...

Section 5 contains exploded views and parts list.

Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

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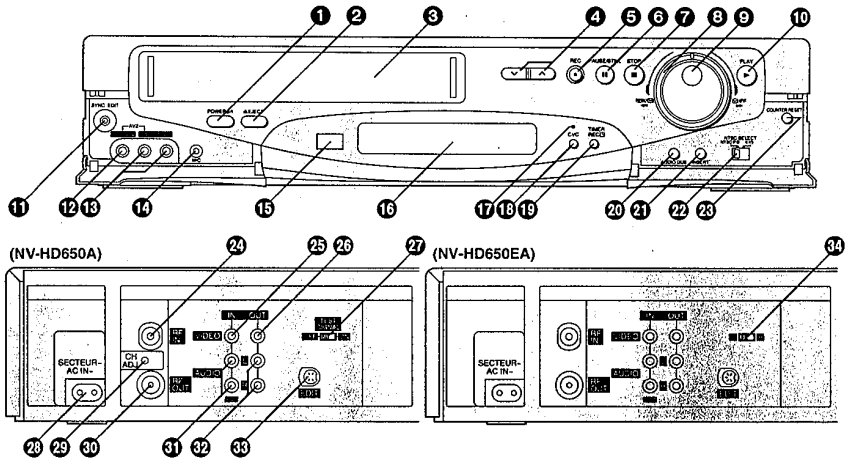
Controls and Connection Sockets

This gives a detailed explanation of the function of each button, switch and connection socket.



❶ **POWER ⏻/I**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.

❷ **EJECT**
To eject a video cassette.

❸ **Cassette Compartment**
Insert a video cassette here.

❹ **∨∧**
To select the required programme position (TV station).

❺ **REC**
To start a recording.

❻ **PAUSE/STILL**
In the stop mode: Still picture (Jog/Shuttle mode).
During playback: Still picture (Jog/Shuttle mode).
During recording: To interrupt recording.

❼ **STOP**
To stop any playback or recording.

❽ **Shuttle Ring**
In the stop mode: To rewind or fast forward the tape.
In the playback mode:
To search picture backward or forward.
In the still playback mode:
To adjust playback speed backward or forward.
In the rewind or fast forward mode:
To obtain high speed picture.

❾ **Jog Dial**
To locate any desired frame with utmost precision.

❿ **PLAY**
To start playback. "▷" is lit.
For the repeat playback function.

⓫ **SYNC. EDIT**
To connect a movie camera or another VTR equipped with synchronized editing capability.

⓬ **VIDEO IN (AV2)**
To connect the video cable to a movie camera or to another VTR.

⓭ **AUDIO IN (AV2)**
To connect the audio cable to a movie camera or to another VTR.

⓮ **MIC**
To connect a microphone for recording. Once connected, this socket has priority.

⓯ **Infra-red Remote Control Receiver Window**

⓰ **Display**

⓱ **CVC Indicator**
When the CVC function is on, this indicator is lit.

⓲ **CVC (Crystal View Control)**
ON: Using the CVC function, playback and recording are performed in the state which achieves optimum picture quality in light of characteristics of a tape.
- The CVC indicator is lit.
- This control should normally be left in the ON position.

OFF: Turn off the CVC function.
- The CVC indicator is not lit.
- With certain tapes, the OFF position may result in a better picture.

⓳ **TIMER REC**
To turn the timer recording function on and off.
⏲ is lit or not lit.
Once operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

⓴ **AUDIO DUB**
To set up the VTR for audio dubbing.
A.DUB is appeared on screen display.

㉑ **INSERT**
To set up the VTR for insert editing.
INSERT is appeared on screen display.

㉒ **NTSC SELECT**
Set according to the colour TV system.
NTSC P.B.: When receiving PAL signals.
For TV's that can only receive PAL signals.
4.43: When receiving NTSC 4.43 signals.
For TV's that can receive NTSC 4.43 signals.

㉓ **COUNTER RESET**
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.

㉔ **RF IN**
To connect to the external aerial.

㉕ **VIDEO IN (AV1)**
To connect a video cable from a Movie Camera or another video recorder.

㉖ **VIDEO OUT**
To connect a video cable to a TV or another video recorder.

㉗ **TEST SIGNAL (NV-HD650A only)**
The test signal is transmitted on channel AU37.

㉘ **AC IN~**
To connect to the main power supply.

㉙ **CH ADJ. (NV-HD650A only)**
To adjust the RF transmitting channel AU31–43.

㉚ **RF OUT**
To connect to the aerial terminal on a TV set.

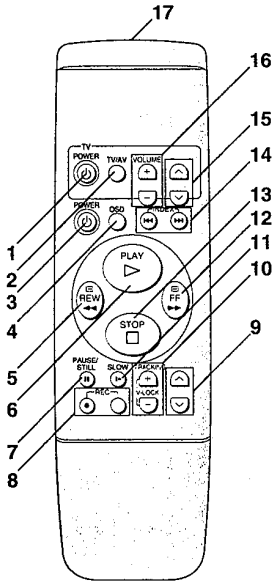
㉛ **AUDIO IN (AV1)**
To connect an audio cable from a Movie Camera or another video recorder.

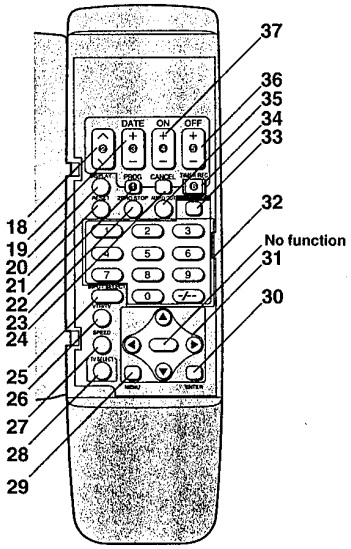
㉜ **AUDIO OUT**
To connect an audio cable to a TV or another video recorder.

㉝ **EDIT**
By connecting the optional Editing Controller (VW-EC300E/VW-EC310E) to this socket, such editing functions as Assemble Editing, Insert Editing and Audio Dubbing can be performed more quickly and efficiently between two VTRs or between a VTR and a movie camera.

㉞ **Video Playback Channel Selector (NV-HD650EA only)**
To select the video playback channel.

Infra-red Remote Controller





1 POWER (TV)
To switch the TV from on to standby mode or vice versa. In standby mode, the TV is still connected to the mains.
- With some TV models, it may only be possible to switch the TV to standby mode using this button. In this case, use **TV/AV** or **∨ ∧ (TV)** to switch the TV on.

2 TV/AV
To select the TV input.

3 POWER (VTR)
To switch the VTR from on to standby mode or vice versa. In standby mode, the VTR is still connected to the mains.

4 OSD
For the On Screen Display Function.

5 REW (REWIND)

In the stop mode:	To rewind the tape
In the playback mode:	To search backward
In the rewind mode:	To obtain high speed picture

"◁◁" is lit.

6 PLAY
To start playback. "▷" is lit.
For the repeat playback function.

7 PAUSE/STILL
During playback: Still picture.
During recording: To interrupt recording.

8 REC
To start a recording.
- Press both buttons simultaneously.

9 ∨ ∧ (VTR)
To select the required programme position (TV station) of the VTR.

10 TRACKING/V-LOCK
For manual tracking adjustment
The + and – buttons are used to adjust the tracking when, for example, noise bars on the picture are better removed manually than by the automatic digital tracking control. After making a manual adjustment, press both buttons together to return to automatic digital tracking control.

For slow tracking adjustment
When noise bars appear during Still or Slow playback, switch over to slow playback and adjust with the + or – Button to reduce the noise bars.

For vertical locking adjustment
Use the + and – buttons to minimize any vertical jitter during still-picture playback.

11 SLOW
For the slow motion playback function. "▯▷" is lit.

12 FF (FAST FORWARD)

In the stop mode:	To fast forward the tape
In the playback mode:	To search forward
In the fast forward mode:	To obtain high speed picture

"▷▷" is lit.

13 STOP
To stop any playback or recording.

14 INDEX
For the index search function.

15 ∨ ∧ (TV)
To select the required programme position (TV station) of the TV.

16 VOLUME
To adjust the volume of the TV.

17 Infra-red Transmitter

18 ∨ ∧
To programme a timer recording.

19 DATE
To programme a timer recording.

20 DISPLAY
To change the indication on the VTR Display.

→Clock→Counter→Remaining Tape Time

21 RESET
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.

22 PROG
To set and check timer programmes.

23 ZERO STOP
For the zero stop function.

24 CANCEL
To cancel the settings made for a timer recording.

25 INPUT SELECT
To select the A1 or A2 external recording source.

26 VTR/TV
To select the VTR mode or TV mode.
(NV-HD650A: No function.)

27 SPEED
To select the tape speed desired for recording.
SP gives the best picture quality.
LP gives the longest recording time.

28 TV SELECT
To set the remote controller for operation of the TV.

29 MENU
To make OSD menu appear on the TV screen.

30 ENTER
To confirm the selection, or to store.

31 ▲ ▼ ◀ ▶
To make selections from On Screen Display.

32 Programme Position Selector Buttons
- To select the programme positions (1–99).

9: (9)

19: (-/--) → (1) → (9)

- To programme a G-Code number.

33 G-Code
For the G-Code programming.

34 TIMER REC
To turn the timer recording function on and off.
⏲ is lit or not lit.
Once operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

35 AUDIO OUT
To select the desired sound mode.
At the every push of this button, the audio output mode changes as follows.

→Stereo→Left→Right→Normal audio track→

The Left (L) and Right (R) Indicators show which sound mode is selected in the following way.

Stereo:	Both the Left (L) and Right (R) Indicators appear.
Left:	The Left (L) Indicator appears.
Right:	The Right (R) Indicator appears.
Normal:	Both the Left (L) and Right (R) Indicators don't appear.

36 OFF
To programme a timer recording.

37 ON
To programme a timer recording.

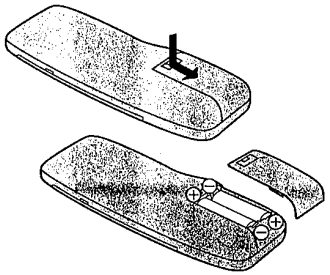
Power Source for the Remote Controller

The remote controller is powered by 2 "AA", "UM3" or "R6" size batteries. The life of the batteries is about one year, although this depends on the frequency of use.

Precautions for Battery Replacement

- Load the new batteries with their polarity (⊕ and ⊖) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.

Installing the Batteries

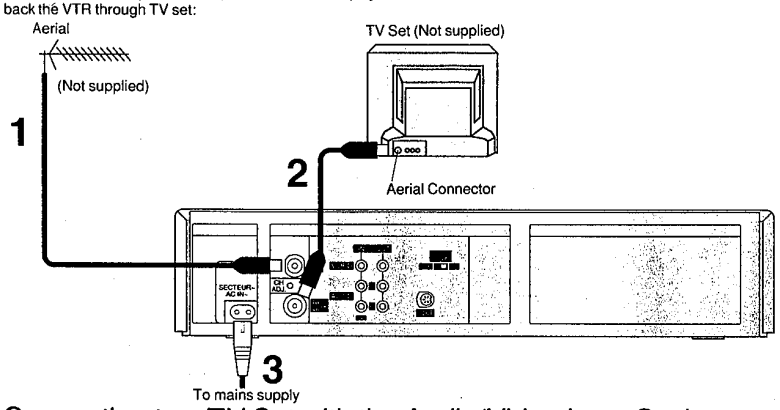


Connections

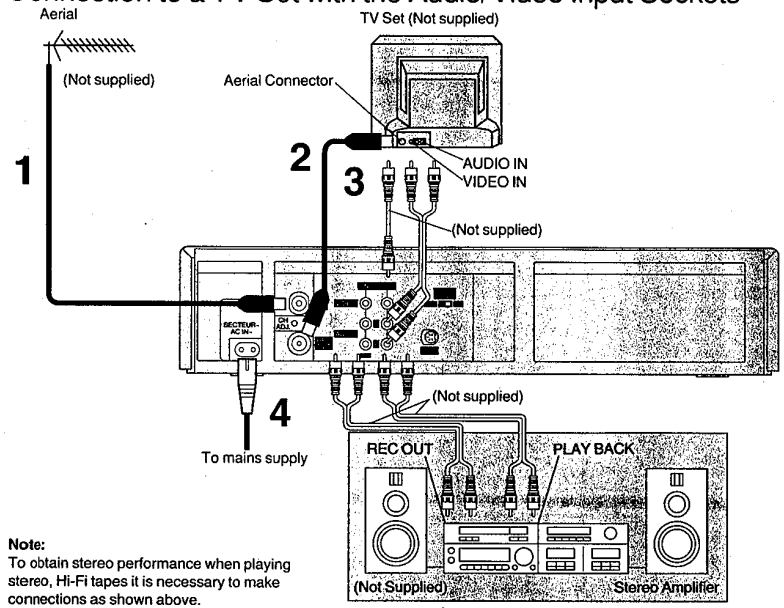
This tells you how to connect with an aerial, TV, etc.

Basic Connections

The following connections are required to record and play back the VTR through TV set:



Connection to a TV Set with the Audio/Video Input Sockets

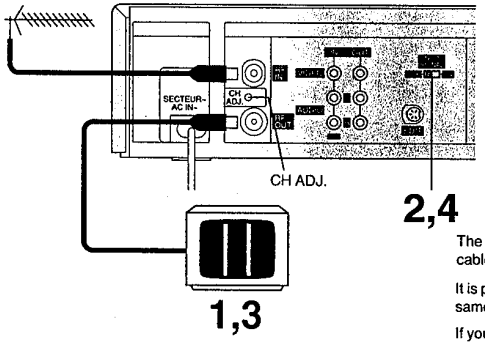


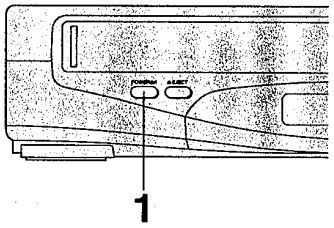
Note:
To obtain stereo performance when playing stereo, Hi-Fi tapes it is necessary to make connections as shown above.

•Connection to a Stereo Amplifier

Tuning the TV to your VTR

NV-HD650A





The VTR supplies a signal to the TV set via the RF coaxial cable on channel AU37.

It is possible to view the video picture on your TV in the same way that you watch TV broadcasts.

If you have connected the VTR to the TV through the video and audio sockets then you do not need to follow the procedure mentioned below.

Operations

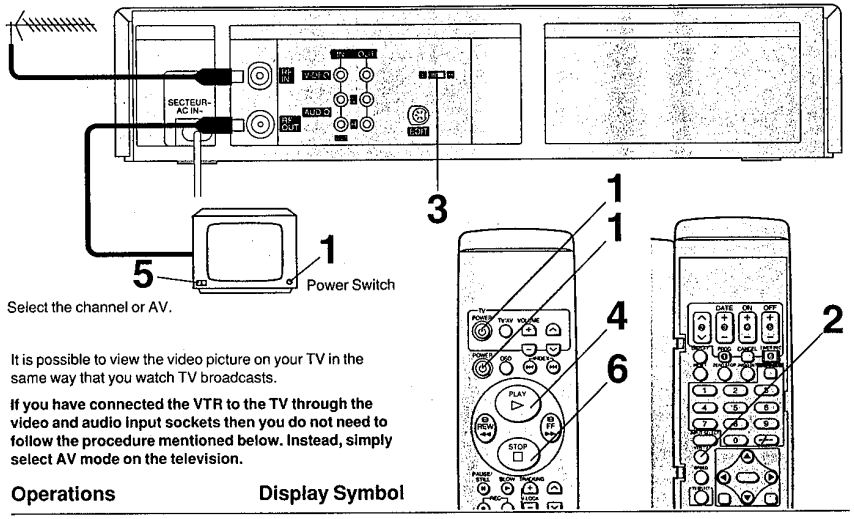
1	POWER	Turn on the TV and VTR.
2	TEST SIGNAL OFF ON	To generate a test pattern, set **TEST SIGNAL** to ON.
3		Set the TV to an unused position which you wish to use for your video playback.
4	TEST SIGNAL OFF ON	Set **TEST SIGNAL** to OFF.

Note:
The test signal is transmitted on video channel AU37. If you are encountering interference from a TV broadcast on this video channel, you may readjust to another free channel (AU31–43) by using the **CH ADJ.** screw which is located on the rear of the VTR.

Please note that if the **CH ADJ.** screw is used then you will have to retune your TV to the test signal as in item **2** to **4** above.

Setting the Remote Controller for Operation of your TV

NV-HD650EA



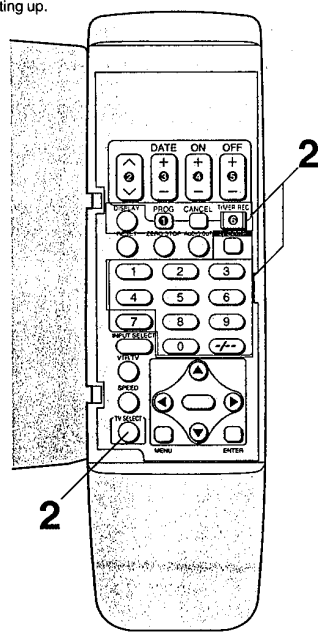
Select the channel or AV.

It is possible to view the video picture on your TV in the same way that you watch TV broadcasts.

If you have connected the VTR to the TV through the video and audio input sockets then you do not need to follow the procedure mentioned below. Instead, simply select AV mode on the television.

Operations		Display Symbol	
1	TV POWER / POWER		Turn on the TV and VTR.
2	VTR/TV	VTR	Select the VTR mode.
3	L H		Select the video playback channel which is not occupied with any TV station. H: Channel 3 L: Channel 2
4	PLAY ▷		Insert a **pre-recorded** cassette tape and press **PLAY**.
5			Select a programme number on the TV set which you wish to use as the video viewing channel. Then tune in the TV to the picture from the cassette tape currently playing.
6	STOP □		Stop the playback.

You can operate some manufacturer of TVs (see following table) using the supplied Remote Controller after this setting up.



Preparation

Install the batteries in the remote controller. See page 7.

Operations

1 Turn on the TV.

2 Press corresponding operation button to your TV manufacturer (see following table) while keeping **TV SELECT** pressed.
- **If setting is correct, TV will be turned off automatically.**

TV Manufacturer	Operation Button
Panasonic/National	TV SELECT + DISPLAY
	TV SELECT + PROG ❶
	TV SELECT + CANCEL
	TV SELECT + TIMER REC ❻
SONY	TV SELECT + 1
TOSHIBA	TV SELECT + 2
JVC	TV SELECT + 3
HITACHI	TV SELECT + 4
MITSUBISHI	TV SELECT + 5
	TV SELECT + 6
SHARP	TV SELECT + 8
PHILIPS	TV SELECT + 9
NEC	TV SELECT + 0
SANYO	TV SELECT + -/--

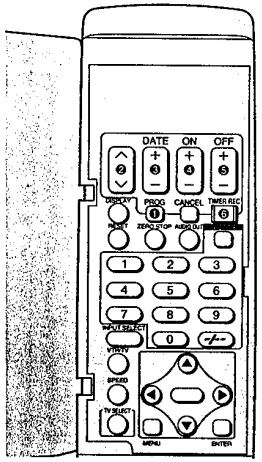
When the TV manufacturer is Panasonic/National or MITSUBISHI:
When the TV's power is turned off in step **2** above, turn it back on and adjust the TV's volume using this remote controller. The volume can be adjusted if the operation button matches the manufacturer of TV.
If it is not possible to adjust the TV's volume, try pressing the other operation button to match the manufacturer of TV again until the volume can be adjusted.

Note:
Some TV models cannot be operated using this remote controller.

Language Setting of On Screen Display

Preparations

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.
- Press **VTR/TV** to select the VTR mode. (NV-HD650EA only)

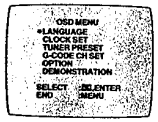


To select the Desired Language

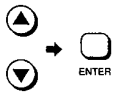
Select one of the two languages displayed: English and Russian.

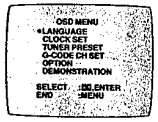
1 Press **MENU**.

On Screen Display

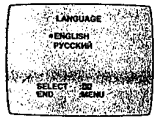


2 Select **LANGUAGE**.





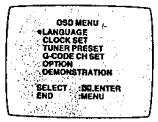
3 Select the desired language.



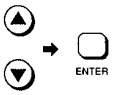
4 Press **MENU** twice.

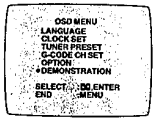
To View a Demonstration

1 Press **MENU**.



2 Select **DEMONSTRATION**.





- During Demonstration mode, all the On Screen Displays are displayed one after the other at about five second intervals.

3 Press **MENU** to stop the Demonstration.

Note:
The Menu Screen has a blue background. However, if there is no signal input during AV1/AV2 is selected, the Menu Screen may change to black and white when **MENU** is pressed. This does not indicate a malfunction.
If this happens, either input a signal or select other programme position.

Setting the Clock of the VTR

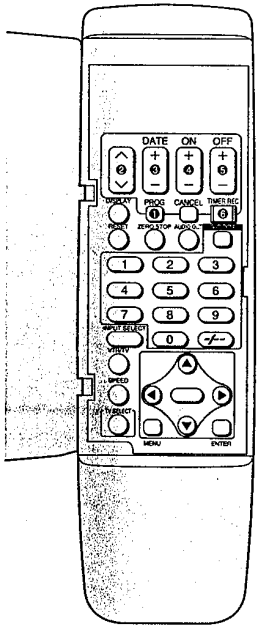
The built-in clock is used to activate the timer for automatic recording and must be set to the correct time.

The built-in digital clock employs the 24-hour system.

For Example:
Date; 16th, October, 1999
Time; 20:15

Preparation

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.
- Press **VTR/TV** to select the VTR mode. (NV-HD650EA only)



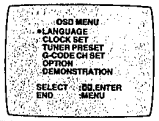
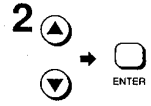
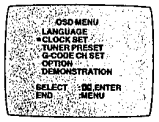
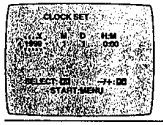
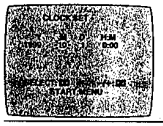
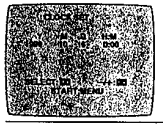
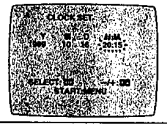
Time Reset Function

If the clock is less than two minutes slow or fast, it can easily be reset to the proper time.

For example:
Resetting the clock to 12:00.00.

1 Select **CLOCK SET** from OSD menu and press **ENTER**.

2 When the current clock display on the VTR is between 11:58 to 12:01, press **MENU** as soon as you hear the 12:00.00 time signal. This resets the time to 12:00.00.

Operations	On Screen Display	
1		Press **MENU**.
2 		Select **CLOCK SET**.
3 Set each item by pressing ▲ or ▼ and ▶.		
		Set **Year** "1999".
		Set **Month** "10".
		Set **Date** "16".
		Set **Time** "20:15". • When it is kept pressed, the indication changes in 30-minute steps. • There is no need to press ▶.
4	**Display Symbol**	Press **MENU**. • The clock will start.

Note:
The clock operates for at least 60 minutes by its backup system in the event of power failure.

Storing TV Broadcasts into your VTR

Introduction

The VTR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 99 TV broadcast stations.

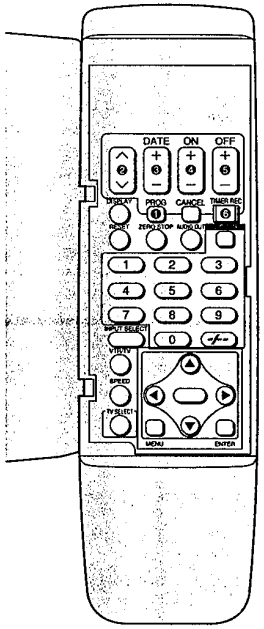
Preparations

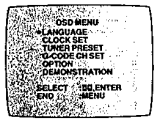
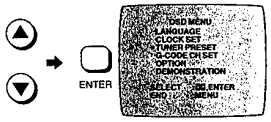
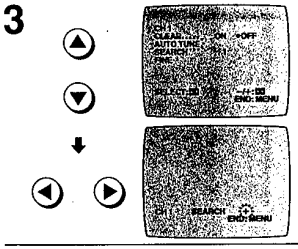
- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR and select the programme position except A1 or A2.
- Press **VTR/TV** to select the VTR mode. (NV-HD650EA only)

PRE-PROGRAMMED TV CHANNELS (NV-HD650A)

The local TV transmission channels 2, 7, 9, 10 and 28 are factory-preset in this VTR. That is, if you can receive television broadcasts on VHF channels 2, 7, 9, 10 and on UHF channel 28, these are already tuned on the programme positions with the matching numbers.
However, it is possible to cancel these presettings and tune the local TV broadcast channels on any desired programme positions.
For alternative settings and tuning of additional TV broadcasts channels, follow the Tuning Operations.

Auto Tuning Procedure



Operations	On Screen Display
1 MENU	 Press **MENU**.
2  ENTER	Select **TUNER PRESET**.
3 	Select **AUTO TUNE** and press ◀ or ▶. • When the Auto Tuning finished, On Screen Display disappears and programme position 1 is selected.

Notes:

- The Auto Tuning is searching for TV station from VHF minimum to UHF maximum and memorizing the data for every programme position. The other programme positions are skipped.
- The Auto Tuning takes seven or more minutes to complete the search.
- If VTR is not correctly tuned by Auto Tuning, follow the procedure on next page.

Manual Tuning Procedure

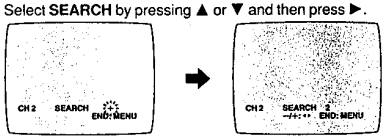
1 Press **MENU**.

2 Select **TUNER PRESET** by pressing ▲ or ▼ and **ENTER**.

3 Select **CH** by pressing ▲ or ▼ and then select the programme position by pressing ◀ or ▶.

4 Confirm that **CLEAR** is set to **OFF**.

5 Select **SEARCH** by pressing ▲ or ▼ and then press ▶.



- If the desired TV station is not be tuned, press ▶ again.
- Press **MENU** and repeat steps **3–5** for each programme position you want to tune to a station.

6 Press **MENU** three times.

Channel Plan

	VHF	UHF
NV-HD650A	0–12	21–69
NV-HD650EA	1–11	21–69

NV-HD650A:

Broadcast TV Channel	Position tuned on VTR
2 ABC	2
7 ATN	7
9 TCN	9
10 TEN	10
28 SBS	28

This table will be required when programming the G-Code.

Fine Tuning Procedure

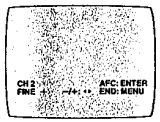
1 Press **MENU**.

2 Select **TUNER PRESET** by pressing ▲ or ▼ and **ENTER**.

3 Select **CH** by pressing ▲ or ▼ and then select the programme position by pressing ◀ or ▶.

4 Select **FINE** by pressing ▲ or ▼.

5 Press ◀ or ▶ to obtain the best tuning condition.



- To return the tuning to its former state, press **ENTER**.

6 Press **MENU**.

Blanking of Unoccupied Programme positions

1 Press **MENU**.

2 Select **TUNER PRESET** by pressing ▲ or ▼ and **ENTER**.

3 Select **CH** by pressing ▲ or ▼ and then select the programme position by pressing ◀ or ▶.

4 Select **CLEAR** by pressing ▲ or ▼.

5 Select **ON** by pressing ◀ or ▶.
- Repeat steps **3–5** for another unoccupied programme positions to skip during the selection of the programme positions.
- To cancel the blanking of a programme position, select that programme position and then select **CLEAR OFF**.

6 Press **MENU** twice.

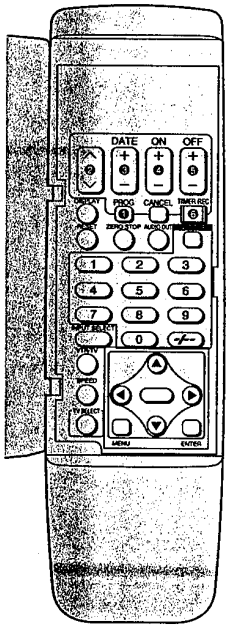
Preparations for G-Code Programming

Identification numbers must be set for G-Code programming. Simply proceed with the G-Code programming operation described on page 26, and the identification numbers of the TV stations concerned will be set automatically. This means that G-Code programming is possible even without performing the operation described on this page. However, you can follow the setting procedure described below if you wish to set the identification numbers of all the TV stations prior to actual programming.

"Identification numbers" refer to the numbers used for identifying the TV stations.
The programme positions on the VTR receiving the TV stations are set in these identification numbers.
Have a newspaper or magazine on hand which lists today's local TV station programmes and G-Code numbers.

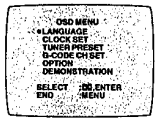
Preparations

- Set the clock of the VTR. See page 13.
- Store TV broadcasts into your VTR. See pages 14 and 15.
- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.
- Press **VTR/TV** to select the VTR mode. (NV-HD650EA only)

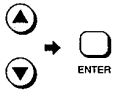


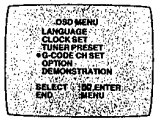
Operations — On Screen Display

1 Press **MENU**.

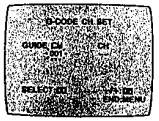


2 Select **G-CODE CH SET**.

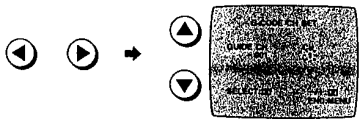




3 Select the identification number (Guide Channel) (001–255).



4 Press ◀ or ▶ and then select the programme position (1–99, A1, A2).



- To set the other TV stations, press ◀ or ▶ and then repeat steps **3** and **4**.

5 Press **MENU** twice.

Note:
To receive satellite stations, the satellite receiver must be connected to the VTR and programme position must be set depending on the type of the connection mode.
A1/A2: When the satellite receiver is connected to the Audio/Video input sockets (AV1/AV2).
- When the satellite receiver is connected by means of the RF coaxial cable, set to a free programme position between 1 and 99.

For Example:
(NV-HD650A)

TV Station	Programme Position on VTR	Guide Channel
ABC	2	002
ATN	7	007
TCN	9	009
TEN	10	010
SBS	28	028/001

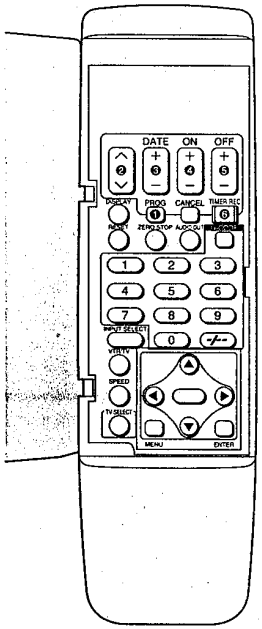
For Example:
(NV-HD650EA)

TV Station	Programme Position on VTR	Guide Channel
TV ONE	1	001
CHANNEL 2	2	002
TV3	3	003
SKY TV MOVIES	4	004
SKY TV SPORTS	5	005
SKY TV NEWS	6	006
SKY ORANGE	7	007
SKY DISCOVERY & TRACKSIDE	8	008
CTV	11	011

Settings Using On Screen Display

Preparations

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.
- Press **VTR/TV** to select the VTR mode. (NV-HD650EA only)

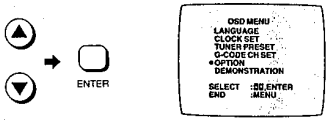


To select the corresponding Cassette Tape Length for displaying the approximate remaining tape time

1 Press **MENU**.

2 Select **OPTION**.

On Screen Display



3 Select **TAPE SELECT**.

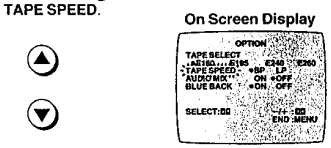
4 Select the corresponding cassette tape length.

E180: For E30, -60, -90, -120, -150 and -180 tapes
E195: For E195 tape
E240: For E240 tape
E260: For E260 and -300 tapes

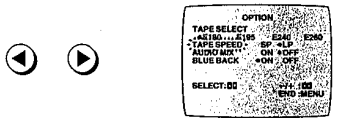
To select the Desired Tape Speed for the manual recording

1 Select **TAPE SPEED**.

On Screen Display



2 Select the desired tape speed.



Audio Mix

1 Select **Audio Mix**.

2 Select **ON** or **OFF**.

ON: Both sound tracks (the Hi-Fi sound track and the normal sound track) are played back mixed together. Use this setting when playing back a cassette tape which has been insert edited or audio dubbed.

OFF: Normally set at this position to reproduce the better sound available from the Hi-Fi track.

For Blue Background Function

When **BLUE BACK** is **ON**, the screen will always have a blue background when no signal is received or the received signal is very weak.

1 Select **BLUE BACK**.

2 Select **ON**.

- When **BLUE BACK** is **OFF**, the blue background function does not work.
- It is not possible to record the blue picture of the blue background function.

To select the Sound Mode (NV-HD650EA only)

1 Select **MONAURAL**.

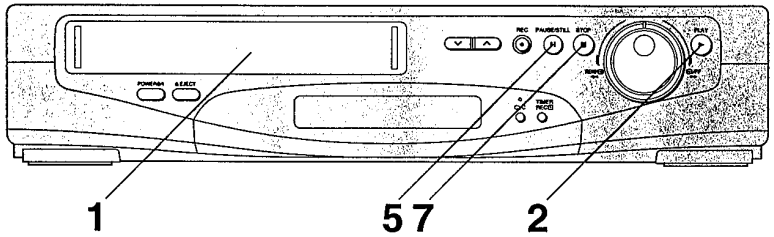
2 Select **OFF**.

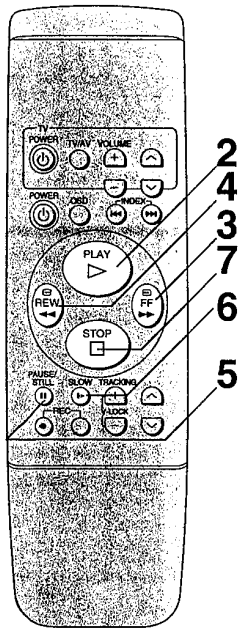
- Select **ON** to record the normal sound during a NICAM broadcast or if the stereo sound is distorted due to inferior reception conditions.

After All Settings are selected

Press **MENU** twice to make On Screen Display disappear.

Playback





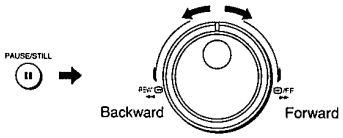
Operations	Display Symbols	
1		Insert a recorded cassette tape.
2 PLAY		Start viewing the picture.
3 FF		Search forward by tapping **FF**. •To change back to normal playback, press **PLAY**.
4 REW		Search backward by tapping **REW**. •To change back to normal playback, press **PLAY**.
5 PAUSE/STILL		View a still picture. •To continue the normal playback, press **PLAY** or **PAUSE/STILL**.
6 SLOW		View the slow motion picture. •To continue the normal playback, press **PLAY**.
7 STOP		Stop viewing the picture.

Other Playback Functions

To change the Playback Speed

1 Press **PAUSE/STILL** on the VTR.

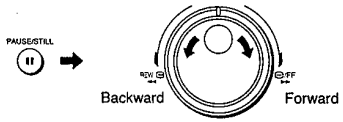
2 Rotate Shuttle Ring.



To locate the Desired Picture Exactly

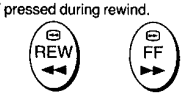
1 Press **PAUSE/STILL** on the VTR.

2 Turn Jog Dial.



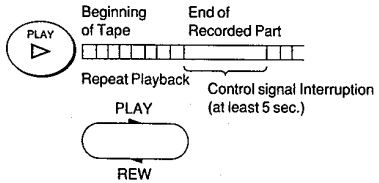
To obtain High Speed Picture During Fast Forward or Rewind

Keep **FF** pressed during fast forward.
Keep **REW** pressed during rewind.



To playback the Recorded Part Repeatedly

Keep **PLAY** pressed for more than 5 seconds.

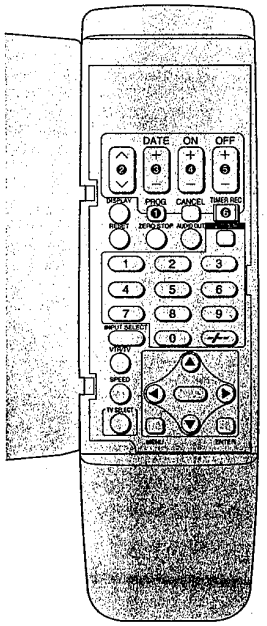


•Press **STOP** to release from Repeat Playback mode.

To return to a Specified Scene

1 Press **RESET** to set the counter to 0:00.00.

2 After playback, press **ZERO STOP** in the stop mode.
•The tape will be rewound or fast forwarded to 0:00.00 approximately.



Notes:

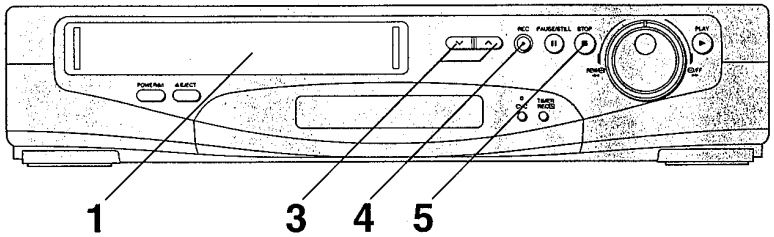
•Audio reproduction of linear (conventionally recorded) tapes will be monaural when played back on the FM Hi-Fi video recorders.

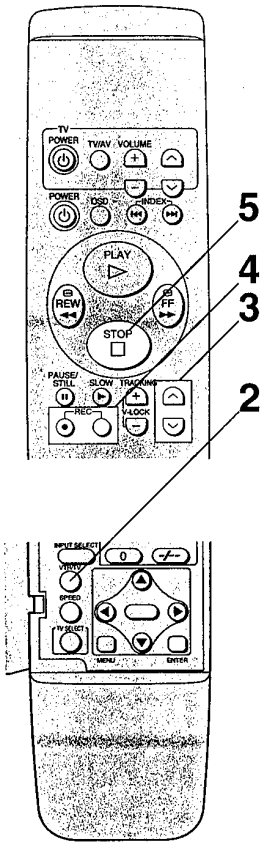
•Cue, review or slow playback will be automatically released after 10 minutes, and still playback after 5 minutes.

•In LP mode only:

1. During any playback mode other than normal playback, the picture may have some noise bars, the colour may be unstable, or a black and white picture may appear.
2. When playing back a tape which was recorded on another VTR, it may be necessary to adjust the Tracking Control. In some cases the picture quality may still be inferior. This is due to limitation of format.

Manual Recording





Operations	Display Symbols	
1		Insert a cassette tape. •If it has already been inserted, press **POWER** to turn the VTR on.
2 VTR/TV	VTR	Select the VTR mode. (NV-HD650EA only)
3		Select TV station.
4 REC		Start recording.
5 STOP		Stop recording.

To select the Desired Tape Speed

Press **SPEED** before recording.

To interrupt Recording

Press **PAUSE/STILL** during recording.
Press again to continue recording.

To record One TV Programme while Viewing Another Programme

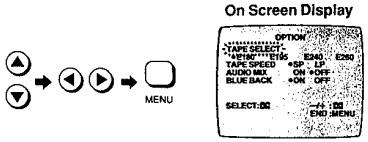
1 Refer to the manual recording operations steps **1** to **4**.

2 Press **VTR/TV** to select the TV mode. (NV-HD650EA only)

3 Select the TV programme on your TV set you wish to view at the present time.

To display the Approximate Remaining Tape Time

1 Select **TAPE SELECT** on **OPTION** on screen display and select the corresponding cassette tape length. See page 18.



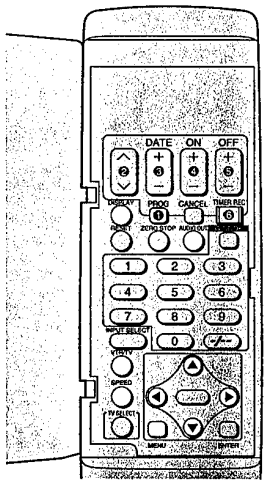
E180: For E30, -60, -90, -120, -150 and -180 tapes
E195: For E195 tape
E240: For E240 tape
E260: For E260 and -300 tapes

2 Press **DISPLAY**.

→Clock→Counter→**Remaining Tape Time**

•The remaining tape time may not be displayed correctly depending on the tape used.

Notes:
•When a video cassette with a broken off tab is inserted, the "" indication will flash to indicate that recording is not possible.
•The recording pause mode will be automatically released after 5 minutes. Revert back to the stop mode.



The NICAM Broadcast System (NV-HD650EA only)

NV-HD650EA is equipped with the NICAM sound system. NICAM is a 2 channel sound broadcast system to provide either a high quality stereo sound track or 2 independent MONO sound tracks, M1 and M2.
NICAM programmes are always accompanied by standard sound broadcasts and you can select the desired sound with **AUDIO OUT** during playback.
•The NICAM digital stereo sound can only be recorded on the Hi-Fi audio track.
•When NICAM programme is being received, the indicators are lit to inform you of the type of broadcast. (See page 30.)
•To record the regular sound (ordinary normal sound) on the FM audio tracks when a NICAM programme is received, select **MONAURAL ON**. (See page 19.)
•To hear stereo performance connect as shown on page 8 to a TV or Stereo Amplifier with left and right audio inputs.

Important Note for the NICAM System
When NV-HD650EA is switched on, the tuner will automatically switch to a NICAM broadcast, if NICAM is being transmitted.
At this time the NICAM signal is transmitted on stereo channels only, since the M1 and M2 formats are not yet available. Even if the sound track is in MONO, the stereo indicator will appear.

Timer Recording

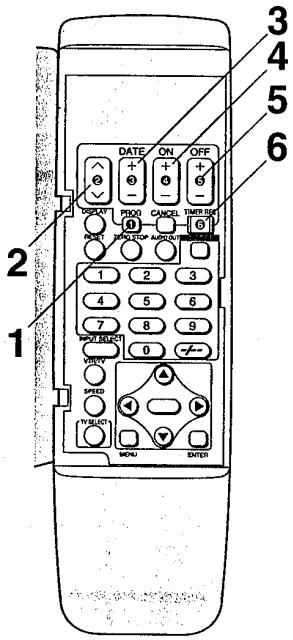
Up to 8 timer programmes can be recorded up to one month in advance by setting the timer, including weekly and daily programmes.

Preparations

- Insert a cassette tape with an intact erasure prevention tab.
- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.
- Press **VTR/TV** to select the VTR mode. (NV-HD650EA only)

For Example:

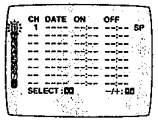
Timer programme number;	1
Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30
(Present date; 16th, October)	



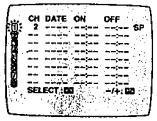
Operations **On Screen Display**

1 Select **Timer Programme number** "1".

PROG ❶

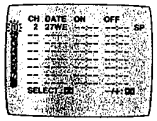


2 Set **Programme position** (channel) "2".



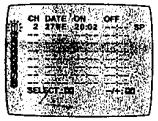
3 Set **Date** "27".

DATE ❸



4 Set **Starting time** "20:02".

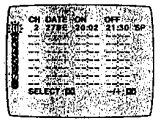
ON ❹



- When it is kept pressed, the indication changes in 30-minute steps.

5 Set **Ending time** "21:30".

OFF ❺



6 To activate timer recording, press **TIMER REC.**

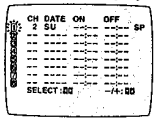
TIMER REC ❻

Weekly Timer Recording

In step **3**, select the desired day by pressing **DATE –**.
For example, SÜ (Sunday)

On Screen Display

DATE ❸



(SU=Sunday, MO=Monday, TU=Tuesday, WE=Wednesday, TH=Thursday, FR=Friday, SA=Saturday)

Daily Timer Recording

For this timer function, several groups of days can be selected.

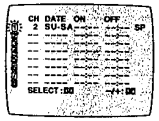
Ⓐ Daily recording from Monday to Friday

Ⓑ Daily recording from Monday to Saturday

Ⓒ Daily recording from Sunday to Saturday

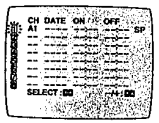
In step **3**, select the desired days by pressing **DATE –**.
For example, Ⓒ

DATE ❸



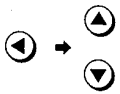
Timer Recording from External Signal Source

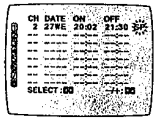
If Timer Recording is performed by a unit connected to the Audio/Video input sockets (AV1/AV2), select the A1 or A2 indicator in step **2** for the programme position.



Selecting the Desired Tape Speed

Press ◀ and then select the desired tape speed by pressing ▲ or ▼ in any of steps **2–5**.





Setting other Programmes in succession

Repeat steps **1–5**.

Checking a Timer Programme

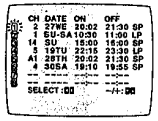
- The VTR must be turned on, or the timer recording indicator "⏲" is lit.
- Confirm that the TV is on and the VTR viewing channel is selected.

1 Press **PROG**.

PROG ❶

2 Press **VTR/TV** to select the VTR mode. (NV-HD650EA only)

VTR/TV



Cancelling a Timer Programme

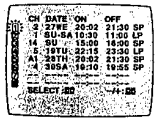
- The VTR must be turned on, or the timer recording indicator "⏲" is lit.
- Confirm that the TV is on and the VTR viewing channel is selected.

1 Press **PROG**.

PROG ❶

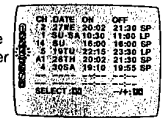
2 Press **VTR/TV** to select the VTR mode. (NV-HD650EA only)

VTR/TV



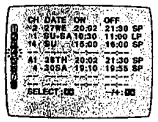
3 Press **PROG** repeatedly until the desired timer programme number is flashed on and off.

PROG ❶



4 Press **CANCEL**.

CANCEL



Note:
If a timer recording is not performed to the end (due to insufficient tape or cancellation by the user), the programmed timer recording data will be cancelled from the memory by 4 a.m. one day later.
However, if the Timer Record Function is activated at that time, the programmed timer recording data will be cancelled at 4 a.m. the next day.

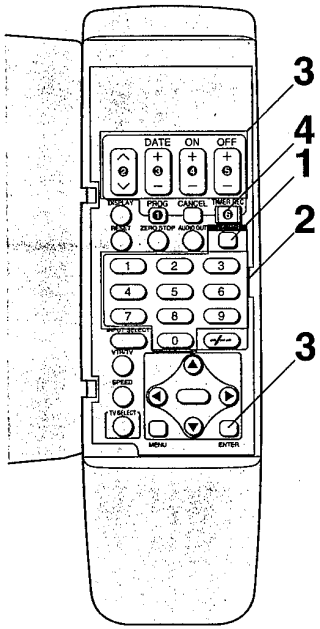
Editing

G-Code Programming

Programming is now easier than ever: simply enter the G-Code number provided in the programme schedule column carried by newspapers and magazines.
G-Code numbers are numbers which are assigned to each programme listed in the TV programme schedule carried in newspapers and TV guides. When these numbers are entered, the numbers are converted into the actual programming.

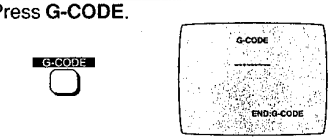
Preparations

- Insert a cassette tape with an intact erasure prevention tab.
- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.
- Press **VTR/TV** to select the VTR mode.
  (NV-HD650EA only)

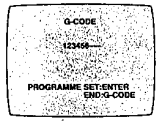


Operations **On Screen Display**

1 Press **G-CODE**.

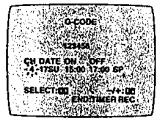


2 Enter a G-Code number.
Example: 123456

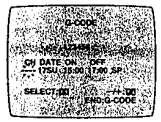


- If you have entered the wrong number, press **CANCEL** and then enter the proper number.

3 Press **ENTER**.



- Confirm that the number corresponds to the right programme. If the display looks like this:



select the programme position of your VTR which receives the TV station you entered at step **2** using button ❷ and then press **ENTER**.
- To make any corrections, use buttons ❸–❺ as the same way on page 24.

4 Press **TIMER REC**.

Notes:
- To select the desired tape speed, press **SPEED** before programming.
- When the G-Code number is used for programming, the recording time may be slightly longer than the actual programme time.
- Repeat steps **2** and **3** if "PROGRAMME IS INCOMPLETE." appears.
- When programming two or more programmes, repeat steps **1–3** before pressing **TIMER REC**.
- The procedures for checking and cancelling a timer programme are the same as on page 25.

Assembly Editing

This function can be used to make up an edited tape from other recordings or video sources.

A new scene can be added to the end of a previous one.

Preparations

- Connect a movie camera or another VTR to this VTR as shown.
- Insert a recorded cassette tape with an intact erasure prevention tab.
- Select the video source required by pressing **INPUT SELECT** to set A1 or A2.
  A1: Through the AV1 (AUDIO IN/VIDEO IN) sockets.
  A2: Through the AV2 (AUDIO IN/VIDEO IN) sockets on front panel.
- Set **NTSC SELECT**.
  NTSC P.B.: When recording in the PAL system.
  4.43: When recording NTSC 4.43 signals from External Signal Source.

When dubbing an NTSC tape, keep the **NTSC SELECT** on both the recording and playback units at the **4.43** position.

Operations

1 Press **PAUSE/STILL** on the recording VTR.

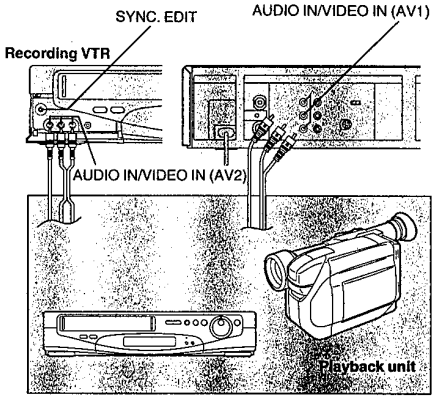
2 Search for the end of the previous recording.

3 Press **REC** to switch the VTR from the pause mode to the recording standby mode.

4 Start the new recording by pressing **PAUSE/STILL** again.

5 Press **STOP** to stop recording.

Note:
The new sound will be recorded on both the normal and Hi-Fi sound tracks, only monaural sound recording is possible on the normal sound tracks.



Synchronized Editing

It is possible to synchronize the playback start and stop of the Movie Camera with the recording start and stop of this VTR.

Preparation
Connect a Movie Camera to this VTR with Synchro Connection Cord (VW-K1E).

1 Put the VTR in the recording pause mode by pressing **PAUSE/STILL** (VTR) and **REC**.
2 Put the Movie Camera in the still playback mode at the point where you want to start editing.
3 Press **PAUSE/STILL** on the VTR.
  - The Movie Camera changes over to the playback mode and the dubbing will start automatically.

Synchronized Editing between the VTRs
When editing from another VTR equipped with Synchro Edit Socket, synchronized start and stop of both VTRs can be activated from this VTR.

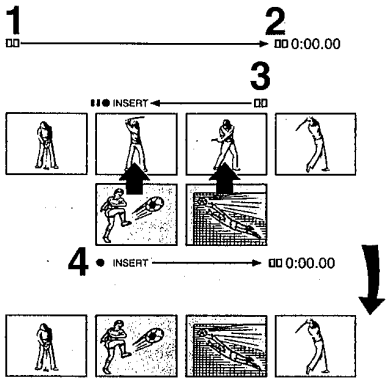
The operation is the same as described for synchronized editing from a Movie Camera.

Insert Editing

This is used to substitute one scene for another providing.

Preparations

- Insert a recorded cassette with an intact erasure prevention tab.
- Select the video source required by pressing **INPUT SELECT** to set A1 or A2.
  A1: Through the AV1 (AUDIO IN/VIDEO IN) sockets.
  A2: Through the AV2 (AUDIO IN/VIDEO IN) sockets on front panel.



Operations		Display Symbols	
1	PAUSE/STILL		Press **PAUSE/STILL** on recording the VTR.
2	COUNTER RESET	0:00.00	Search for the Edit out (ending) point, and set the counter to 0:00.00 by pressing **COUNTER RESET**.
3	INSERT	On Screen Display: A2 -0:00.22 SP INSERT / A2 -0:00.22 SP AV INSERT	Search for the Edit in (starting) point, and press **INSERT**. • If you want to replace the sound on the "normal" audio track, press **AUDIO DUB**, too. (AV Insert Editing)
4	PAUSE/STILL	A2 -0:00.22 SP INSERT / A2 -0:00.22 SP AV INSERT	Start insert editing by pressing **PAUSE/STILL**. • The insert editing will finish when the counter reaches 0:00.00.

Note:
Insert Editing cannot be used on blank sections of a tape.
In this case use Assembly Editing first.

The new sound will be recorded on the Hi-Fi sound track.
If AUDIO DUB selected, the new sound will also be recorded on the normal sound track.

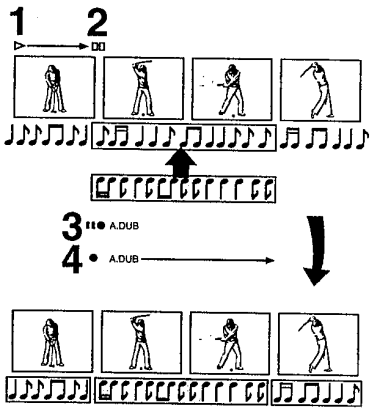
Only monaural sound recording is possible on the normal sound tracks.

Audio Dubbing

The audio dubbing is made on the normal audio track and erases the original sound on this track. On Hi-Fi audio tracks, however, the original sound is maintained.

Preparations

- Insert a recorded cassette with an intact erasure prevention tab.
- Select the video source required by pressing **INPUT SELECT** to set A1 or A2.
  A1: Through the AV1 (AUDIO IN) sockets.
  A2: Through the AV2 (AUDIO IN) sockets on front panel.



Operations		Display Symbols	
1	PLAY		Search for the starting point for audio dubbing.
2	PAUSE/STILL		Press **PAUSE/STILL** at the starting point.
3	AUDIO DUB	On Screen Display: A2 -0:00.22 SP A.DUB	Set for audio dubbing by pressing **AUDIO DUB**. • On some televisions, the screen image may become unstable or begin to scroll at this point. However, this is not an indication of a malfunction.
4	PAUSE/STILL	A2 0:00.22 SP A.DUB	Start recording the new sound by pressing **PAUSE/STILL**. • Stop recording by pressing **STOP**.

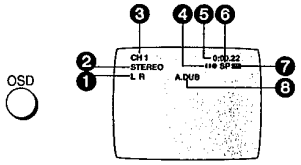
Note:
The new sound will be recorded on the normal sound track of the tape, and the original sound will remain on the Hi-Fi sound track. Only monaural sound recording is possible on the normal sound track.

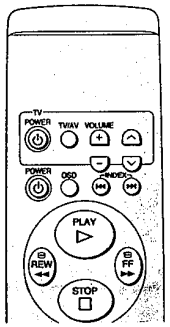
To hear the new sound, select the normal sound track by pressing **AUDIO OUT**.
To hear the new sound and original sound mixed together, set **Audio MIX** to ON. (See page 19.)

Other Functions

On Screen Display

Press **OSD** to make the On Screen Display appear on the TV screen.
•To make this display disappear, press **OSD** again.





❶ **Audio Output Mode Indicators**
The Left (L) and Right (R) Indicators show which sound mode is selected with **AUDIO OUT**.

Stereo: Both the Left (L) and Right (R) Indicators appear.
Left: The Left (L) Indicator appears.
Right: The Right (R) Indicator appears.
Normal: Both the Left (L) and Right (R) Indicators don't appear.

❷ **STEREO or BILINGUAL Indicator (NV-HD650A)**
When receiving a TV programme, the type of sound system in which it is broadcast is automatically indicated.

STEREO, M1 and M2 Indicator (NV-HD650EA)
When receiving a TV programme with the NICAM sound system, the type of sound system in which it is broadcast is automatically indicated.
STEREO: When receiving a NICAM stereo broadcast.
M1 M2: When receiving a NICAM dual-sound broadcast.
M1: When receiving a NICAM monaural broadcast.

Note:
To hear stereo performance connect as shown on page 8 to a TV or Stereo Amplifier with left and right audio inputs.

❸ **Programme position**

❹ **Tape running display**

Stop, Eject	
Rewind, Review	◀◀
Fast Forward, Cue	▶▶
Playback	▶
Still Playback	❚❚
Recording	●
Recording Pause	❚❚●
Slow Playback	❚▶

❺ **Present time/Tape counter**

Information	Display
Present time	17:24
Tape counter	−2:35.47
Remaining Tape Time	REMAIN 2:34
Dew	DEW
Index search	S 01

❻ **Tape speed indicator**

❼ **Cassette-in indicator**

❽ **Edit mode**
When edit mode (Insert Editing, AV Insert Editing, Audio Dubbing) is set, the On Screen Display appears.
INSERT: Insert Editing
AV INSERT: AV Insert Editing
A.DUB: Audio Dubbing

Note:
On Screen Display may be disturbed or disappear during special playback.

VHS Index Search System

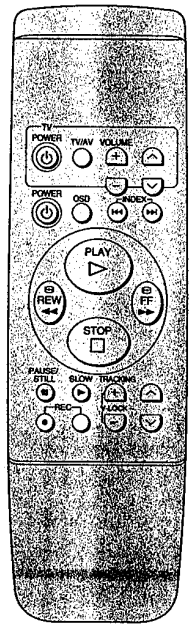
It is very easy to find the beginning of each recording, because a special index signal is recorded at the start of each recorded segment on the tape.

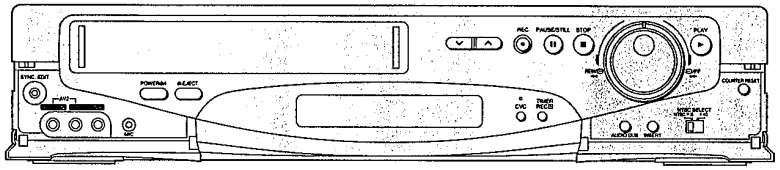
For example:
Searching for the 2nd recorded segment in the forward direction.

Press **INDEX** ▶▶I twice.

•After finding the specific recorded segment, playback starts automatically.
•For the reverse direction, press **INDEX** I◀◀.
•Up to 20 index signals can be searched for in both directions.
•When the opposite **INDEX** button is pressed, the number shall be decreased till 1.
•The figure on the display is decremented by 1 each time an index signal is located.
•The INDEX search function can only work correctly, if the index signals are spaced at least 3 minutes apart in the SP mode and 5 minutes apart in the LP mode.

Recording Index Signals
Index signals are recorded in following cases.
•When a recording is started by pressing **REC**.
•When **REC** is pressed during recording.
•When timer recording is activated.





NTSC Playback

Tapes recorded in the NTSC system can be played back with this VTR via a PAL system TV set.

- Set **NTSC SELECT** according to the colour TV system of the TV set.
  NTSC P.B.: For TV's that can only receive PAL signals.
  4.43: For TV's that can receive NTSC 4.43 signals.

A note about NTSC playback on PAL TV
On some TVs, the playback picture may roll up or down: adjust this using the V-HOLD control on the TV. TVs not equipped with a V-HOLD control cannot correct this condition. The playback picture will shrink vertically, and black bars will appear both on the top and bottom of the screen. This is not an indication of a malfunction.

- During Cue, Review, Still or Slow playback, the picture may not be in colour.
- This function is designed only to allow the playback of tapes recorded by NTSC signals on a PAL system TV. The NTSC signal is not completely converted to a PAL signal. For this reason, images played back by this function cannot be recorded on another VTR.

Other Automatic Functions

Automatic playback
When a cassette without an erasure prevention tab is inserted, the VTR starts playback automatically.

VTR-off playback
When the VTR is off, an inserted cassette can be played back by pressing **PLAY**.

Automatic rewinding
When the tape reaches its end during recording (except for timer recording) or playback, it will automatically be rewound to the beginning.

Automatic switching off and ejection
When the VTR is switched off, an inserted cassette can be ejected simply by pressing **EJECT**. The VTR will eject the cassette and automatically turn itself off again.

S-VHS Quasi Playback (SQPB)

It is also possible to playback tapes recorded in the S-VHS system.

- Some picture noise may occur depending on the type of tape used.
- It is not possible to fully obtain the high resolution that S-VHS is capable of.
- It is not possible to record in the S-VHS system with this VTR.

SECTION 2
ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD

2-1-1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing.
When reassembling, perform the steps in the reverse order.

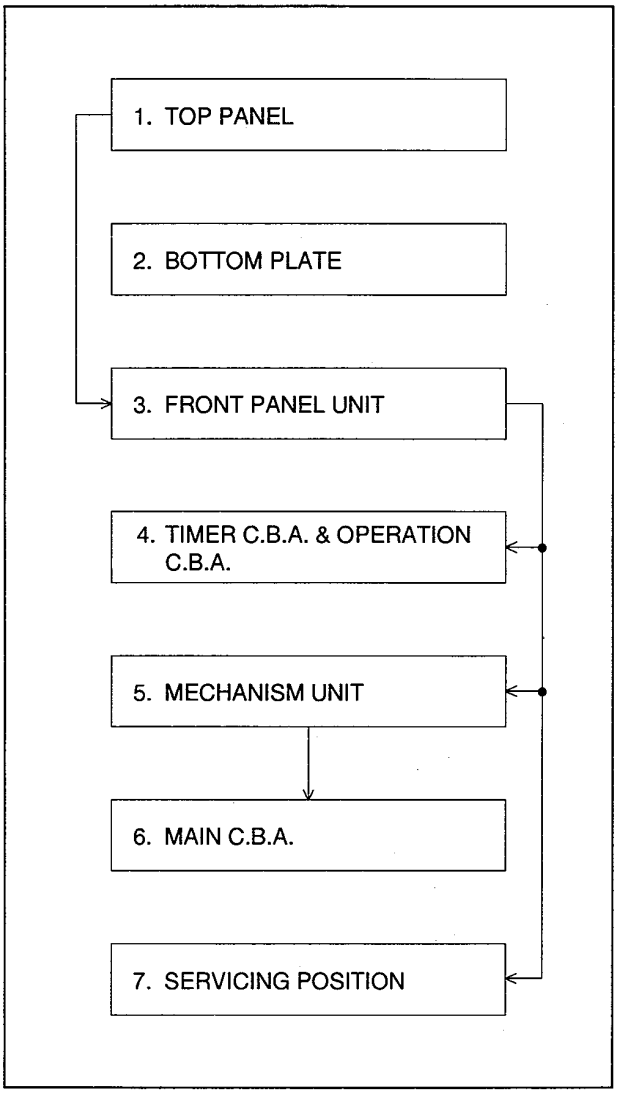


Fig. D1

2-1-2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE TOP PANEL

Remove..... 4 Screws (A)

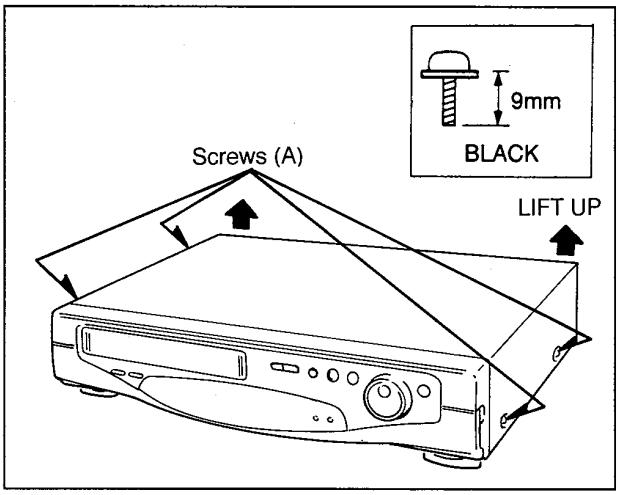


Fig. D2

2. REMOVAL OF THE BOTTOM PLATE

Remove..... Screw (B)
Remove..... 2 Screws (C)
Unlock ..... 4 tabs (D)

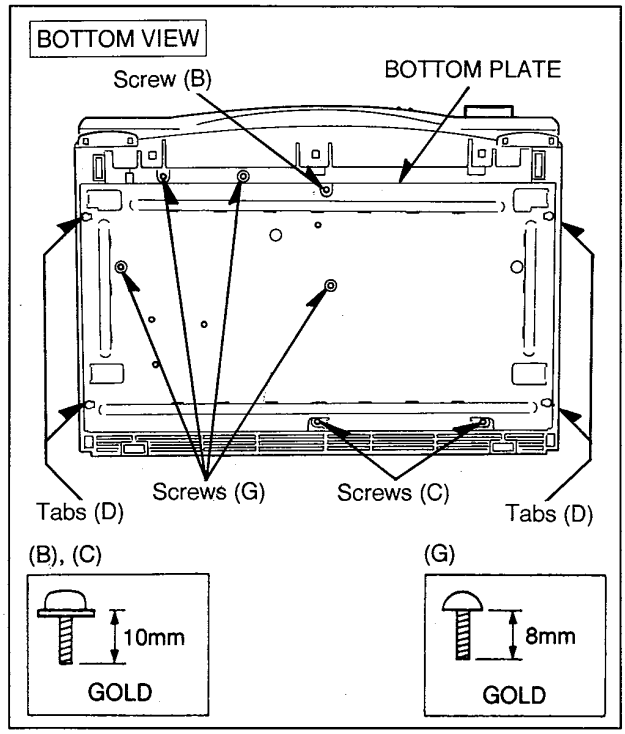


Fig. D3

3. REMOVAL OF THE FRONT PANEL UNIT

Pull out ..... JOG & SHUTTLE Knob
Remove ..... Screw (D)
Unlock ..... 8 Tabs (E)

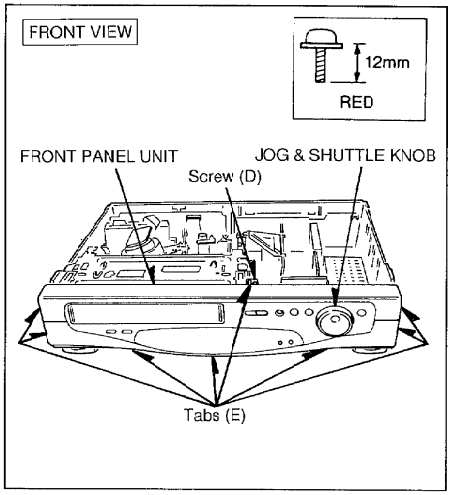


Fig. D4

4. REMOVAL OF THE TIMER C.B.A. & OPERATION C.B.A.

Unlock ..... 6 Tabs (F)

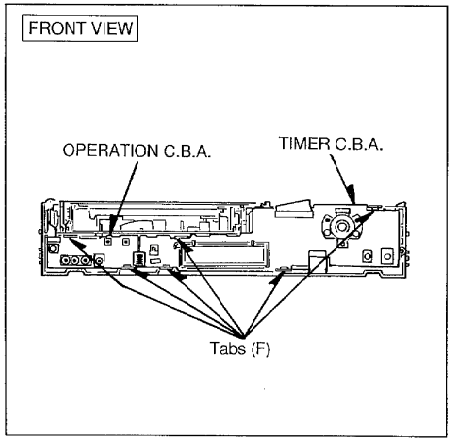


Fig. D5

5. REMOVAL OF THE MECHANISM UNIT

Remove..... 4 Screws (G) [Fig. D3]
Remove..... 3 Screws (H)
Remove..... Screw (I)
Unlock ..... Tab (J) and PACK HOLDER

6. REMOVAL OF THE MAIN C.B.A.

Remove..... 2 Screws (C) [Fig. D3]
Unlock ..... 7 Tabs (K)

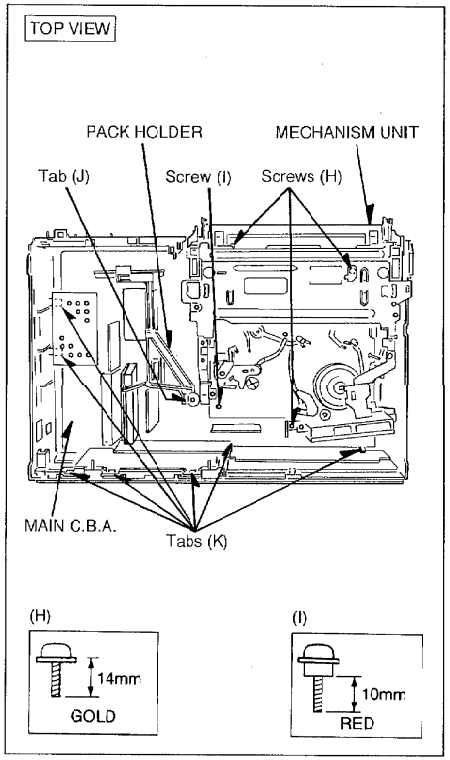


Fig. D6

7. SERVICING POSITION

Remove ..... 2 Screws (C) [Fig. D3]
Remove ..... 3 Screws (H)
Remove ..... Screw (I)
Unlock ..... Tab (J) and PACK HOLDER
Unlock ..... 7 Tabs (K)

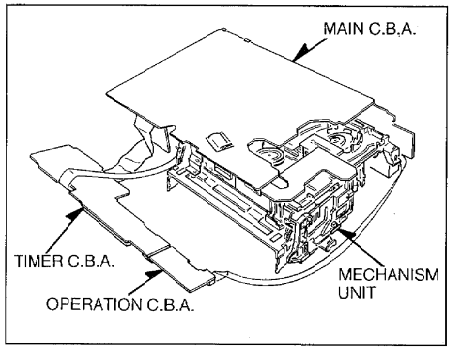


Fig. D7

2-2. MECHANICAL ADJUSTMENT PROCEDURES

The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VRD9307M131)

CAUTIONS:

To make a Adjustment Mode for Tape Interchangeability, turn off the Auto Tracking as follows.

Turn the Shuttle Ring to FF then push the EJECT button 3 times to set the Service Mode 2.

2-3. DISASSEMBLY PROCEDURES OF MECHANISM

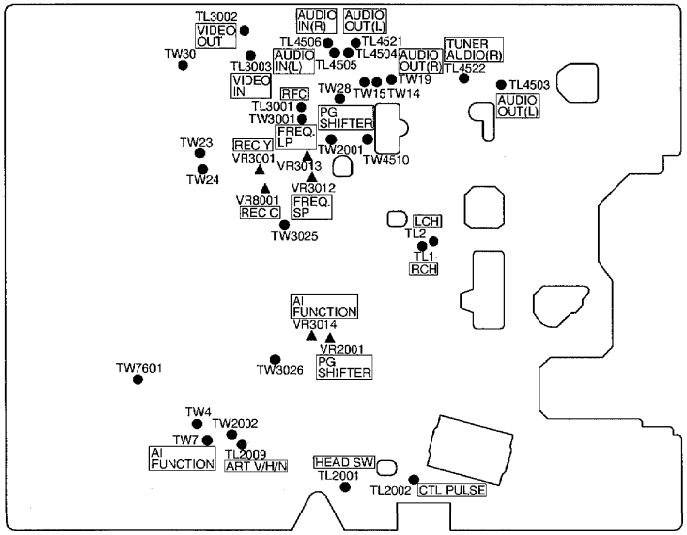
The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VRD9307M131)

2-4. ASSEMBLY PROCEDURES OF MECHANISM

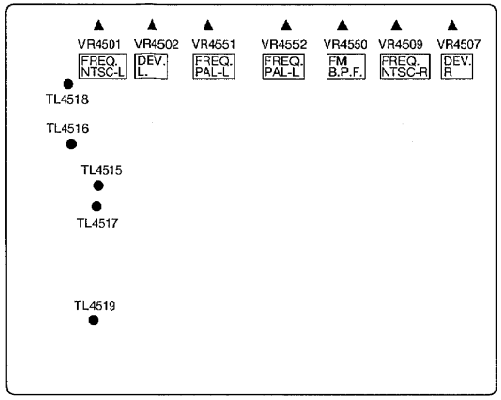
The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VRD9307M131)

LOCATION OF TEST POINTS & CONTROLS

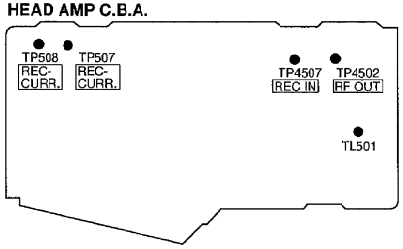
MAIN C.B.A.



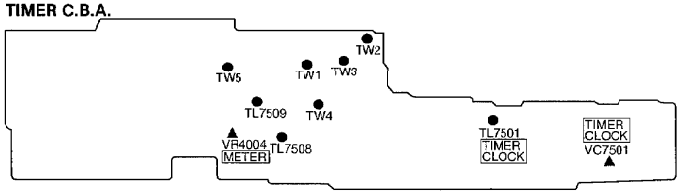
Hi-Fi AUDIO PACK C.B.A.



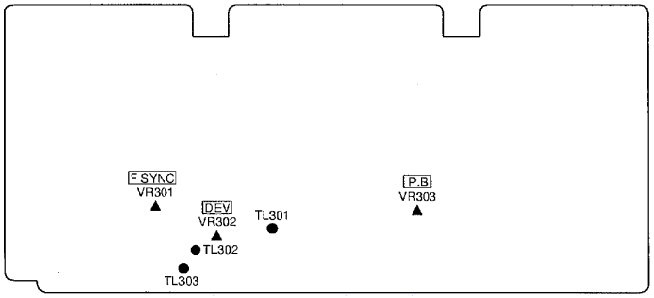
HEAD AMP C.B.A.



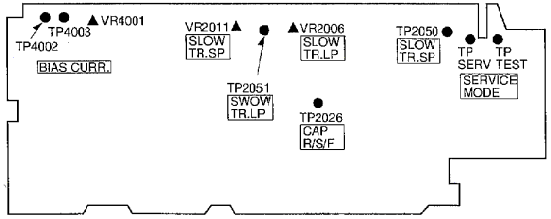
TIMER C.B.A.



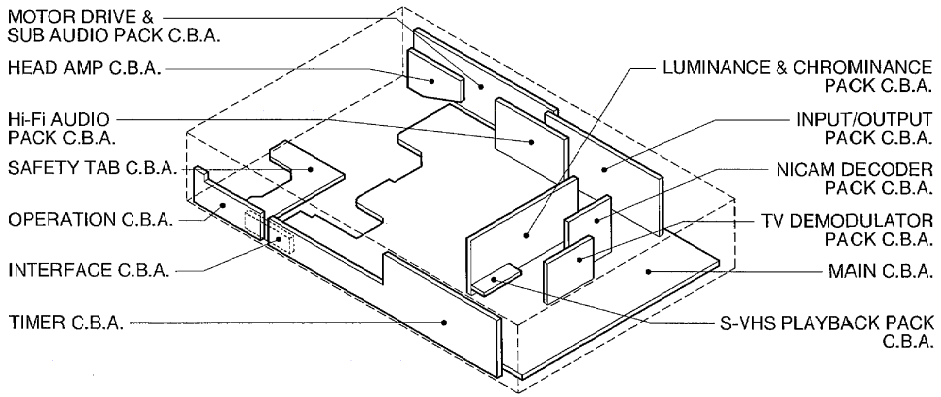
LUMINANCE & CHROMINANCE PACK C.B.A.



MOTOR DRIVE & SUB AUDIO PACK C.B.A.



CIRCUIT BOARD LAYOUT



2-5. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete adjustment procedures required for electric circuits of VHS Video Cassette Recorders.

2-5-1. TEST EQUIPMENT
To perform electrical adjustments following equipment is required.

1. Dual-Trace Oscilloscope. (More than 35MHz)
   Voltage Range: 0.005-5V/div
   Frequency Range: DC-35MHz
   Probes: 10:1 OR 1:1
2. Frequency Counter.
   Frequency Range: 0-10MHz
   Probes: 1:1
3. Universal Counter.
4. Digital Volt Meter. (D.V.M.)
5. Video Sweep Generator.
6. Sine Wave Generator.
7. Video Pattern Generator.
8. VHS Alignment Tape. (VFJ8125H3F)
9. VHS Blank Tape.
10. Monitor.
11. Plastic Tip Driver.
12. DC Power Supply.

2-5-2. PREPARATION
During adjustment, set each selector as follows: when no indication in the procedure.

CVC SW .....ON
TAPE SPEED .....SP
CHANNEL.....AV1/AV2
(Set to signal input terminal number)
TEST SIGNAL SW (REAR) .....OFF
(NV-HD650A ONLY)
NTSC SELECT SW .....NTSC P.B

2-5-3. HOW TO READ ADJUSTMENT PROCEDURES

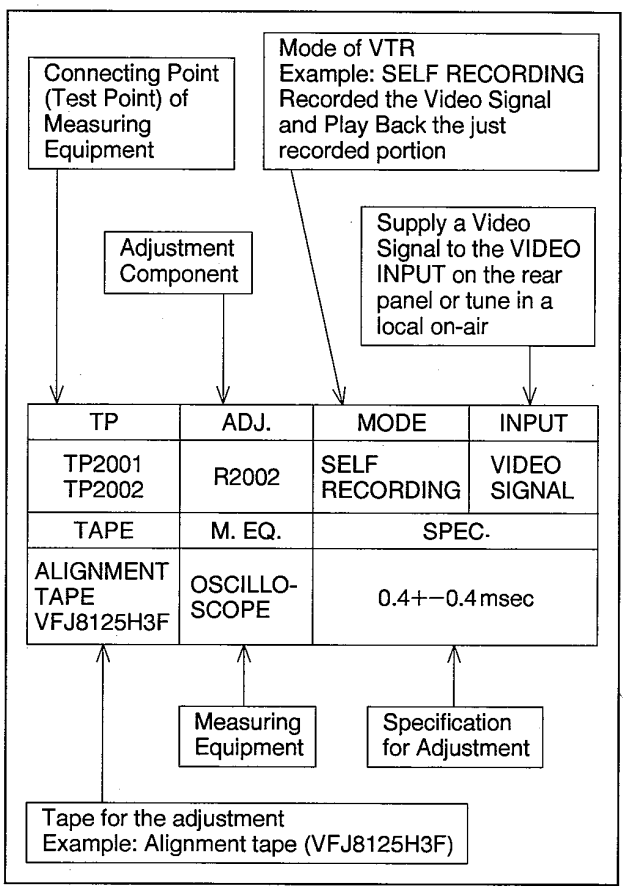


Fig. E1

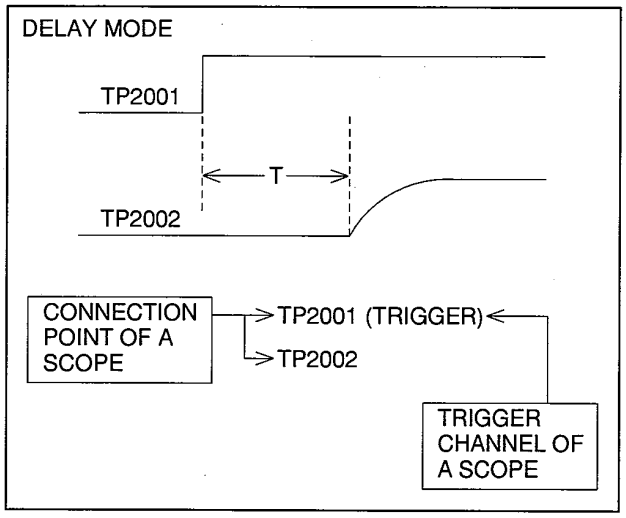


Fig. E2

SERVO SECTION

2-5-4. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TW2001 VIDEO OUT	VR2001	PLAYBACK	
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	7.0+−0.5 (H)	

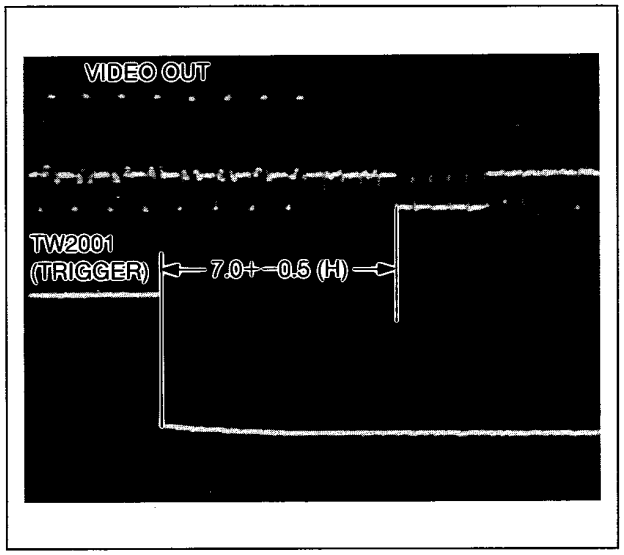


Fig. E3

LUMINANCE & CHROMINANCE SECTION

2-5-5. RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR3001 (Y) VR8001 (C)	SP RECORDING	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	Y=130+−5 (mVp-p) C=32+−2 (mVp-p)	

Note: 1. Adjust the Luminance level until the peak level of V-SYNC is 130+−5mVp-p.
2. When adjusting the Chrominance level, Supply +5V DC to Pin 6 of PP3001 to eliminate Luminance component.

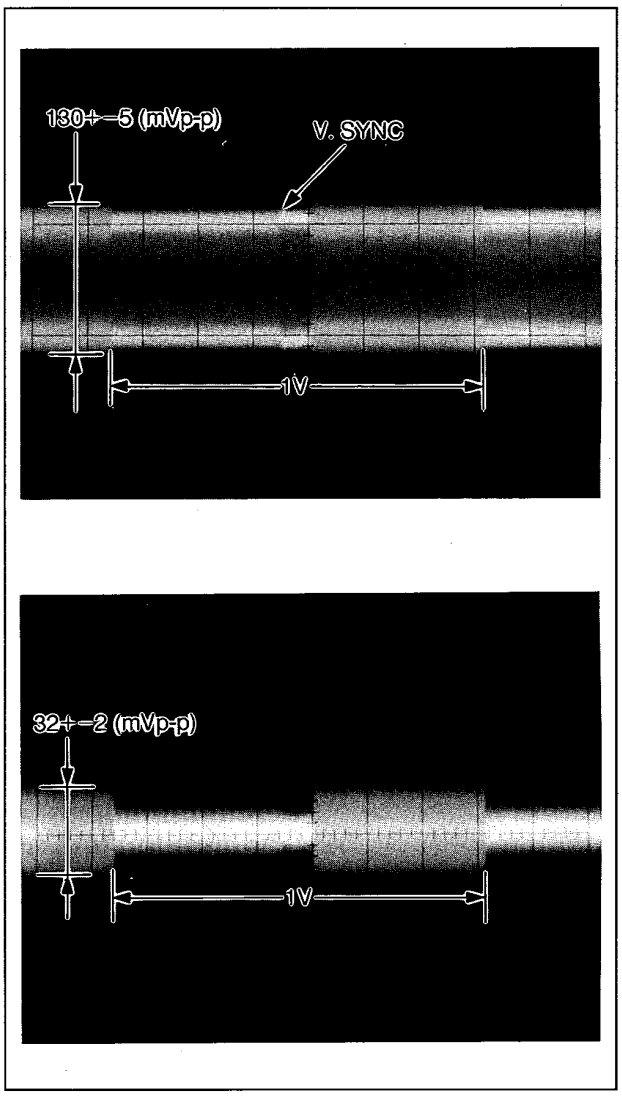
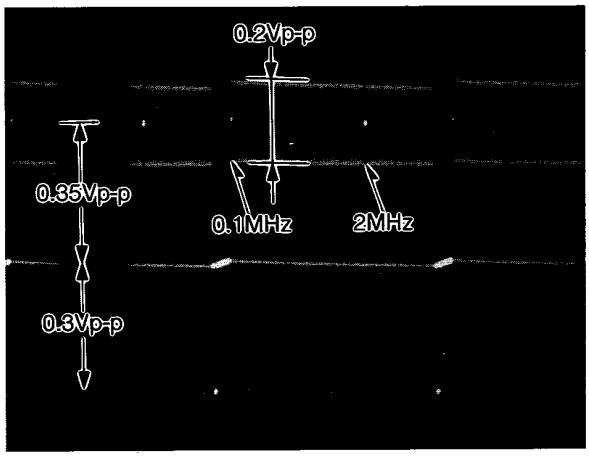


Fig. E4

2-5-6. VIDEO FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR3012 (SP) VR3013 (LP)	SP/LP (SELF RECORD) PLAYBACK	VIDEO SWEEP SIGNAL (Shown in Fig. E7)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE/ VIDEO SWEEP GENERATOR	SP: 0+−1 (dB) (90−110%) LP : 0+−1 (dB) (90−110%)	

Note: 1. Set the Video Sweep Signal as shown in Fig. E5.
2. Set the CVC SW to OFF position.



CONDITION: BURST SIGNAL OFF
75 ohm TERMINATED

Fig. E5

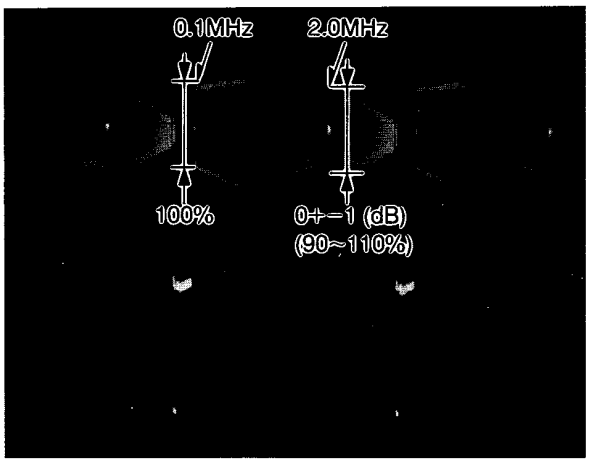


Fig. E6

2-5-7. PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR303	PLAYBACK	
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	Y: 2.0+−0.1 Vp-p CYAN: 1.1+−0.3 Vp-p	

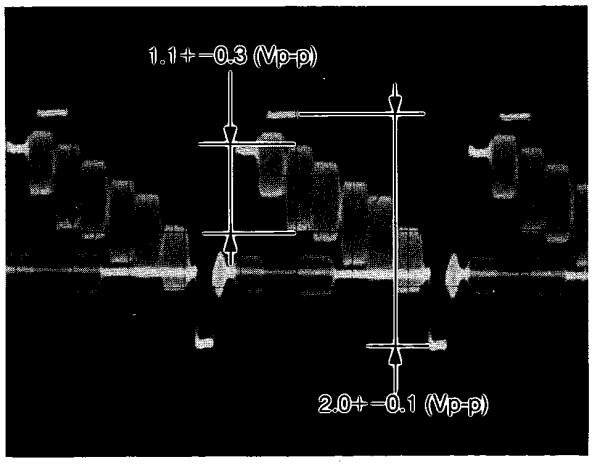


Fig. E7

2-5-8. DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR301 VR302	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	Y: 2.0+−0.1 (Vp-p) (VIDEO: SYNC=70 : 30)	

Note: 1. Before this adjustment, the PLAYBACK LEVEL ADJUSTMENT (2-5-7) must be done.
2. Record the colour bar signal and adjust VR301 and VR302 during recording.
3. Playback the just recorded portion and confirm the playback Y-signal level is 2.0+−0.1 Vp-p.
4. If the signal level is out of the specification, repeat 2 and 3 until the signal level is the specification.

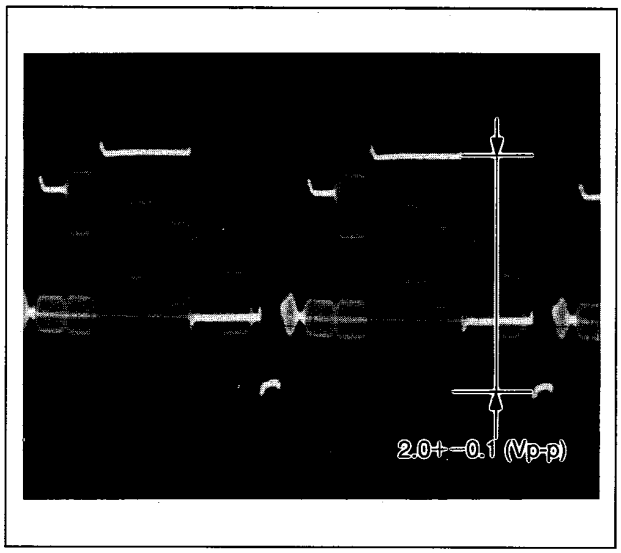


Fig. E8

2-5-9. AI FUNCTION ADJUSTMENT

TP	ADJ.	MODE	INPUT
TW7	VR3014	PLAYBACK (SELF RECORDED)	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	D.V.M	2.5+−0.3 (V)	

AUDIO SECTION

2-5-10. BIAS CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4002 (HOT) TP4003 (GND)	VR4001	RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE	D.V.M.	2.6+−0.1 (mVrms)	

Note: 1. Connect the Audio Input and GND.

2-5-11. CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-34 (L) IC4501-47 (R)	VR4501 (NTSC-L) VR4509 (NTSC-R) VR4551 (PAL-L) VR4552 (PAL-R)	SP RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE	FREQUENCY COUNTER	NTSC-L: 1.3+−0.003 (MHz) NTSC-R: 1.7+−0.003 (MHz) PAL-L: 1.4+−0.003 (MHz) PAL-R: 1.8+−0.003 (MHz)	

Note: 1. When adjusting the NTSC mode, connect a jumper wire between PP3002-2 and GND.
2. When adjusting the PAL mode, disconnect a jumper wire.

2-5-12. DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
BETWEEN VR4502 and R4511 (L) BETWEEN VR4507 and R4561 (R)	VR4502 (L) VR4507 (R)	SP RECORDING	SINEWAVE 1KHz/−6dB (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	V.T.V.M./ SINEWAVE GENERATOR	110 (mVrms)	

Note: 1. Before recording the sinewave, set the sinewave generator until the audio outputs (L) and (R) are 400mVrms.

2-5-13. FM B.P.F. ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-33 (L) IC4501-48 (R)	VR4550	PLAYBACK	SINEWAVE 1.608MHz/ 200mVp-p (PK4003-8)
TAPE	M. EQ.	SPEC.	
NTSC RECORDED TAPE	OSCILLO-SCOPE/ SINEWAVE GENERATOR	Lch (IC4501-33)= Rch (IC4501-48)	

Note: 1. Disconnect P501 (from MAIN C.B.A. to HEAD AMP C.B.A.).
2. The GND lead of oscilloscope must be connected to GND on HIFI AUDIO PACK C.B.A. to reduce the noise.
3. Supply the sinewave signal (1.608MHz/200mVp-p) to PK4003-8.
4. After this adjustment, connect P501.

TIMER SECTION

2-5-14. TIMER REFERENCE CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT
TL7501	VC7501	STOP	
TAPE	M. EQ.	SPEC.	
	UNIVERSAL COUNTER	7812.5+−0.015 (usec)	

2-5-15. LEVEL METER SENSITIVITY ADJUSTMENT

TP	ADJ.	MODE	INPUT
LEVEL METER ON THE FIP	VR4004	STOP	SINEWAVE 1KHz/−6dB (AVI IN)
TAPE	M. EQ.	SPEC.	
		0dB INDICATOR ON THE AUDIO LEVEL METER JUST LIGHTS UP	

Note: 1. Select the STEREO mode.
(Both Left and Right indicators on the FIP are lit.)
2. Before recording the sinewave, set the sinewave generator until the audio outputs (L) and (R) are 400mVrms.
3. Before this adjustment, the HIFI EE LEVEL ADJUSTMENT (2-5-11) must be done.

Memo

SECTION 3
ABBREVIATIONS & BLOCK DIAGRAMS

3-1. ABBREVIATIONS

443NT [L]	4.43 NTSC Ⓛ
A. COMP	AUDIO COMPONENT SIGNAL
A. COMPO	AUDIO COMPONENT SIGNAL
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ
A. DEF [S]	AUDIO DEFEAT
A. DEF [S] [L]	AUDIO DEFEAT
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ
A. DUB [H]	AUDIO DUBBING Ⓗ
A. ERASE	AUDIO ERASE
A. H. SW	AUDIO HEAD SWITCHING PULSE
A. HEAD [R]	AUDIO HEAD (REC)
A. HEAD [W]	AUDIO HEAD (PLAY)
A. IN [L]	AUDIO INPUT (L)
A. IN [R]	AUDIO INPUT (R)
A. MUT [H]	AUDIO MUTE Ⓗ
A. MUTE [H]	AUDIO MUTE Ⓗ
A. OUT [L]	AUDIO OUTPUT (L)
A. OUT [R]	AUDIO OUTPUT (R)
A. RF OUT	AUDIO RF SIGNAL OUTPUT
A/VS/S. DATA	AV SW/SERIAL DATA
AC ONLINE	AC ONLINE
AC. O/EE. H	AC ONLINE/EE Ⓗ
AFC S C	AFC S CURVE
AFC [S]	AFC S CURVE
AFC. DEF	AFC DEFEAT
ARFC OUT	AUDIO RF SIGNAL OUTPUT
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL Ⓗ/NORMAL
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE
AUDIO IN [L]	AUDIO INPUT (L)
AUDIO IN [R]	AUDIO INPUT (R)
AUDIO OUT [L]	AUDIO OUTPUT (L)
AUDIO OUT [R]	AUDIO OUTPUT (R)
AUDIO SELECT [H]	AUDIO SELECT Ⓗ
AUDIO. L	AUDIO (L)
AUDIO. R	AUDIO (R)
AV CNT	AV CONTROL
AV CTL	AV CONTROL
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK
AV. C.M.	AV CONTROL MODE
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)
AVSW/METER. L	AV SW/LEVEL METER (L)
B MODE. H	B MODE Ⓗ
B.G.P	BURST GATE PULSE
BACKUP 5V	BACK UP 5V
BAND. U.E.	BAND U
BANDVL. D	BAND VL
BI/MI [L]	BILINGUAL/MIX Ⓛ
BIL	BILINGUAL
BIL [L]	BILINGUAL Ⓛ
BIL. [H]	BILINGUAL Ⓗ
BIL/M1 [L]	BILINGUAL Ⓛ
BS CLOCK	BS CLOCK
BS DATA	BS DATA
BS LCH IN	BS L CHANNEL INPUT
BS MIX [H]	BS MIX Ⓗ
BS MON [H]	BS MONITOR Ⓗ
BS MONI [H]	BS MONITOR Ⓗ
BS RCH IN	BS R CHANNEL INPUT
BS VIDEO	BS VIDEO SIGNAL
BS VIDEO/BS1	BS VIDEO SIGNAL
BS [H]	BS Ⓗ
BS. LEVEL	BS LEVEL
BS. M [H]	BS MONITOR Ⓗ
BS/VTR [H]	BS/VTR Ⓗ
BUS CLK	BUS CLOCK
BUS LSN	BUS LISTEN
BUS TLK	BUS TALK
BUZZER	BUZZER
CAP EC	CAPSTAN TORQUE CONTROL
CAP M GND	CAPSTAN MOTOR GND
CAP. ET	CAPSTAN TORQUE CONTROL
CAP. FG1	CAPSTAN FG1 PULSE
CAP. FG2	CAPSTAN FG2 PULSE
CAS. SW	CASSETTE SW
CCN	PLAYBACK CONTROL SIGNAL (−)
CCP	PLAYBACK CONTROL SIGNAL (+)
CHM	CONTROL SIGNAL (+)
CHP	CONTROL SIGNAL (−)
CINEM [L]	CINEMA Ⓛ
CINEMA [L]	CINEMA Ⓛ
CINEMA/MIX	CINEMA/MIX
CKL	RATCH LOCK
CKS	SHIFT LOCK
CL	CLOCK
CLK	CLOCK
CLK (C.G)	CLOCK
CLOCK. IN	CLOCK INPUT
CLP	CLAMP
COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
COLOR [H]	COLOUR Ⓗ
CONV	CONVERTOR
CS	CHIP SELECT
CTL GND	CONTROL GND
CTL HEAD [+]	CONTROL HEAD (+)
CTL HEAD [−]	CONTROL HEAD (−)
CTL [+]	CONTROL HEAD (+)
CTL [−]	CONTROL HEAD (−)
CUE BIAS	CUE BIAS
CURRENT LIM	CURRENT LIMMITER
CYL ET	CYLINDER TORQUE CONTROL
CYL GND	CYLINDER GND
D.F.M. REC [H]	DELAIED FM RECORDING Ⓗ
D. FM REC [L]	DELAIED FM RECORDING Ⓛ
D. GND	DIGITAL GND

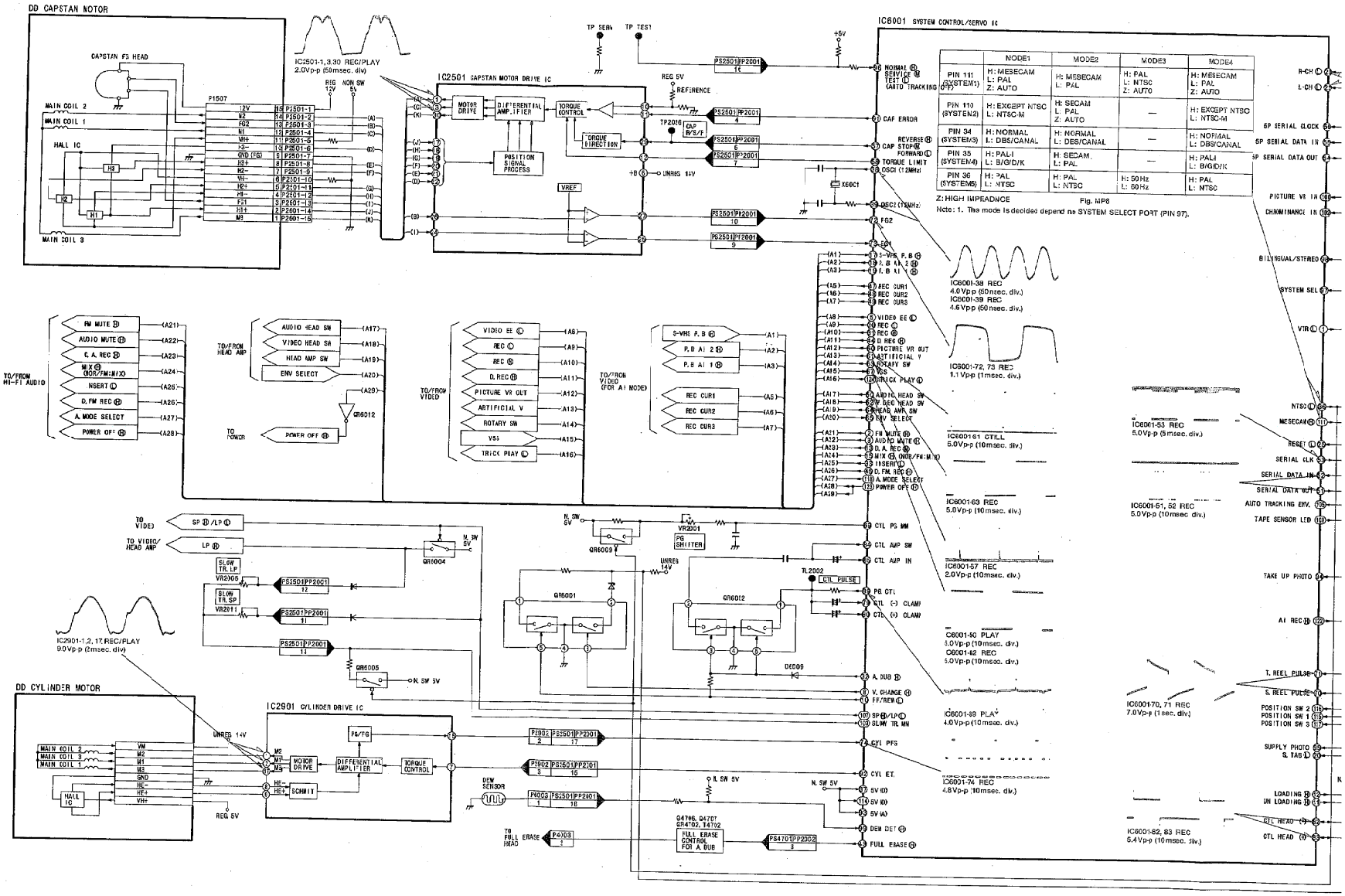
D. REC [H]	DELAYED RECORDING Ⓗ	H. SYNC	HORIZONTAL SYNC
D4/S. LED	D4/STILL LED	H. AMP. SW	HEAD AMP SW PULSE
D4/STILLED	D4/STILL LED	H. P <R>	HEAD PHONE (R)
DAC [CLK]	TUNER DAC (CLOCK)	H. P <L>	HEAD PHONE (L)
DAC/FSCS	TUNER DAC/FS CHIP SELECT	H. P GND	HEAD PHONE GND
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ	H. P OUT [L]	HEAD PHONE OUTPUT (L)
DATA	DATA	H. P OUT [R]	HEAD PHONE OUTPUT (R)
DECODER [L]	DECODER (L)	H. SW	HEAD SW PULSE
DECODER [R]	DECODER (R)	HEAD PHONE [L]	HEAD PHONE (L)
DEW	DEW	HEAD PHONE [R]	HEAD PHONE (R)
DEW SNS	DEW SENSOR	HEAD SW	HEAD SW
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ	HEATER [+]	HEATER (+)
E. REC 5V	EXCEPT RECORDING 5V	HEATER [−]	HEATER (−)
EC	ERR0R TORQUE CONTROL	HSS	HORIZONTAL SYNC SIGNAL
ECR	ERROR TORQUE CONTROL	HTR [+]	HEATER (+)
	REFERENCE VOLTAGE	HTR [−]	HEATER (−)
EDT TRIG [L]	EDIT TRIGGER Ⓛ	I RFE	REFERENCE CURRENT
EDIT [H]	EDIT Ⓗ	ICL	CONTROL AGC CIRCUIT
EE [H]	EE Ⓗ	IF	INTERMEDIATE FREQUENCY
EE [H]/INS [M]	EE Ⓗ/INSERT Ⓜ	IN SELA1	INPUT SELECT A1 POSITION
EE. VV. TR	EE/VV/TRICK PLAY	IN SELA2	INPUT SELECT A2 POSITION
EJECT. PO	EJECT POSITION	IN SELA3	INPUT SELECT A3 POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK	iNS L/R [L]	INSERT Lch/Rch Ⓛ
ENV. SEL	ENVELOPE SELECT	INS. [H]	INSERT Ⓗ
ENVE. OUT	ENVELOPE OUTPUT	INSEL A1	INPUT SELECT A1 POSITION
ENVE. SEL	ENVELOPE SELECT	INSEL A2	INPUT SELECT A2 POSITION
ENV SELECT	ENVELOPE SELECT	INSERT	INSERT
EP [H]	LP Ⓗ	INSERT [H]	INSERT Ⓗ
EP/LP [H]	LP Ⓗ	IO CS	INPUT/OUTPUT CHIP SELECT
EP/LP/SP	LP/SP	JOG1	JOG1
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ	JOG S3 LED/FOWRD	JOG LED/FORWARD LED
EPROMCS	EPROM CHIP SELECT	JOG/F. LED	JOG LED/FORWARD LED
EX. REC 5V	EXCEPT RECORDING 5V	JSB [H]	JSB Ⓗ
FF/REW [L]	FIRST FORWARD/REWIND Ⓛ	JST. CLCK	JUST CLOCK
FG1 IN	FG1 PULSE INPUT	JST. CLK	JUST CLOCK
FG2 IN	FG2 PULSE INPUT	JST. CLOCK	JUST CLOCK
FILTER ADJUSTMEN	FILTER ADJUSTMENT	L. OUT	Lch OUTPUT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ	L. CH [H]	Lch Ⓗ
FLY ON [H]	FLYING ERASE E HEAD ON Ⓗ	L. CH [L]	Lch Ⓛ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ	LED (MAIN)	LED (MAIN)
FM MUT [H]	FM AUDIO MUTE Ⓗ	LED (STEREO)	LED (STEREO)
FM MUTE [H]	FM AUDIO MUTE Ⓗ	LED (SUB)	LED (SUB)
FM OUT [L]	FM OUTPUT (L)	LED CKL	LED SERIAL CLOCK
FM OUT [R]	FM OUTPUT (R)	LED CKS	LED SERIAL CLOCK
FM PACK OUT [L]	FM PACK OUTPUT (L)	LED DATA	LED SERIAL DATA
FM PACK OUT [R]	FM PACK OUTPUT (R)	LINE IN 1 [L]	LINE INPUT 1 (L)
FM/BS SEL [L]	FM/BS SELECT (L)	LINE IN 1 [R]	LINE INPUT 1 (R)
FM/BS SEL [R]	FM/BS SELECT (R)	LINE IN 2 [L]	LINE INPUT 2 (L)
FS. CLK	FS CLOCK	LINE IN 2 [R]	LINE INPUT 2 (R)
FUL. E [H]	FULL ERASE HEAD ON Ⓗ	LINE IN V	LINE INPUT VIDEO
FULL. E [H]	FULL ERASE HEAD ON Ⓗ	LINE IN [L]	LINE INPUT (L)
FULL. E. 12V	FULL ERASE 12V	LINE IN [R]	LINE INPUT (R)
GND [A]	GND (ANALOGUE)	LINE OUT [L]	LINE OUTPUT (L)
GND [TU]	GND (TUNER)	LINE OUT [R]	LINE OUTPUT (R)
GND/N. SW. 12V	GND/NON SW 12V	LP [H]	LP Ⓗ

LPTRI [L]	LP TRICK PLAY Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING
M GND	MOTOR GND
M REG	MOTOR REGULATOR
MAIN OUT	MAIN OUTPUT
MAIN [L]	MAIN Ⓛ
MAIN/MONO	MAIN/MONAURAL
MAX IN	MAXIMAM INPUT
MES [H]	MESECAM Ⓗ
MESE [H]	MESECAM Ⓗ
MESE [L]	MESECAM Ⓛ
METER 5V	LEVEL METER 5V
METER [L]	LEVEL METER (L)
METER [R]	LEVEL METER (R)
METER. L/AVS	LEVEL METER (L)
METER. R/AVC	LEVEL METER (R)
MI/BI [L]	MIX Ⓗ/BILIGUAL
MIC GND	MIC GND
MIC IN	MIC INPUT
MIC IN [L]	MIC INPUT (L)
MIC IN [R]	MIC INPUT (R)
MIC [H]	MIC Ⓗ
MIX [H]	MIX Ⓗ
MIX [H]/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINE	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MN. H/M. L	MONAURAL Ⓗ/MAIN Ⓛ
MN. H/MAI. L	MONAURAL Ⓗ/MAIN Ⓛ
MN2/MES. L	MONAURAL 2/MESECAM Ⓛ
MODE SEL	AUDIO MODE SELECT
MODE SW	AUDIO MODE SW
MODE. S. IN	AUDIO MODE SELECT INPUT
MODE. S. OUT	AUDIO MODE SELECT OUTPUT
MONO [H]	MONAURAL Ⓗ
MONO [H]/MAIN [L]	MONAURAL Ⓗ/MAIN Ⓛ
MONO2 [L]	MONAURAL 2
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM Ⓛ)
MOTOR GND	MOTOR GND
MUTE	MUTE
N. A. REC [L]	NORMAL AUDIO RECORDING
N. SW 12V	NON SW 12V
N. SW. 5. DET	NON SW 5V DETECT
NICAM	NICAM
NICAM [L]	NICAM Ⓛ
NOL [H]	PAL Ⓗ/4.43 NTSC Ⓜ/3.58 NTSC Ⓛ
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY Ⓗ
NORMAL [H]	NORMAL Ⓗ
NR BIAS	NR BIAS
NTSC [L]	NTSC Ⓛ
OCH	CONTROL AGC CIRCUIT
OUT	OUTPUT
P-OFF [H]	POWER OFF Ⓗ
P-OFF [L]	POWER OFF Ⓛ
P. FAIL	POWER FAILURE DETECT
P. OFF [H]	POWER OFF Ⓗ

P. OFF [L]	POWER OFF Ⓛ
PAL [H]	PAL Ⓗ
PAL [L]/NTSC [H]	PAL Ⓛ/NTSC Ⓗ
PB ADJ OUT	PLAYBACK ADJUST OUTPUT
PB OUT	PLAYBACK OUTPUT
PB. H	PLAYBACK Ⓗ
PFG	PG/FG
PHOTSN +B	PHOTO SENSOR +B
PICT. CNT	PICTURE CONTROL
PLAY LED/RVS LED	PLAY LED/REVERSE LED
PLAY. PO	PLAY POSITION
PLAY/R. LED	PLAY LED/REVERSE LED
PLY/DEW	PLAY/DEW Ⓗ
POWER OFF [L]	POWER OFF Ⓛ
PREROLL [H]	PREROLL Ⓗ
PWRFAIL	POWER FAILURE DETECT
R. CH [H]	Rch Ⓗ
R. CH [L]	Rch Ⓛ
R. ST	RESET
R/S/F	REVERSE Ⓗ/STOP Ⓜ/FORWARD Ⓛ
RCH [H]	Rch Ⓗ
REC 12V	RECORDING 12V
REC CHROMA	RECORDING CHROMINANCE SIGNAL
REC H	RECORDING Ⓗ
REC IN	RECORDING INPUT
REC OUT [L]	RECORDING OUTPUT Ⓛ
REC START	RECORDING START
REC VR [C]	RECORDING VOLUME (COMMON)
REC VR [L]	RECORDING VOLUME (L)
REC VR [R]	RECORDING VOLUME (R)
REC Y	RECORDING LUMINANCE SIGNAL
REC [H]	RECORDING Ⓗ
REC. C	RECORDING CHROMINANCE SIGNAL
REC. Y	RECORDING LUMINANCE SIGNAL
REC/EE CTL	RECORDING/EE CONTROL
REEL-T	REEL PULSE (TAKE-UP)
REEL-S	REEL PULSE (SUPPLY)
REGULATOR FILTER	REGULATOR FILTER
RESET	RESET
REV M F/R	REVIEW MOTOR FORWARD/REVERSE
REV M V1	REVIEW MOTOR V1
REV M V2	REVIEW MOTOR V2
REV MOTOR F/R	REVIEW MOTOR FORWARD/REVERSE
REV MOTOR V1	REVIEW MOROR V1
REV MOTOR V2	REVIEW MOTOR V2
REV MOTOR [+]	REVIEW MOTOR (+)
REV MOTOR [−]	REVIEW MOTOR (−)
REV. M. GND	REVIEW MOTOR GND
RF. CHROMA	RF CHROMINANCE SIGNAL
RF OUT	RF OUTPUT
RF Y	RF LUMINANCE SIGNAL
RF. Y. IN	RF LUMINANCE SIGNAL INPUT
RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT

ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S. TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓗ
SLNID [+]	SOLENOID (+)
SLNID [−]	SOLENOID (−)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓗ/NORMAL Ⓗ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL:ST	STOP1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓗ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ
SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE
T. BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ/CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRIC PLAY Ⓛ
TRICK [L]	TRIC PLAY Ⓛ
TRK. ENV	AUTO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓗ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	RERERENCE OSCILLATER
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓗ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT

3-2. SYSTEM CONTROL & SERVO BLOCK DIAGRAM

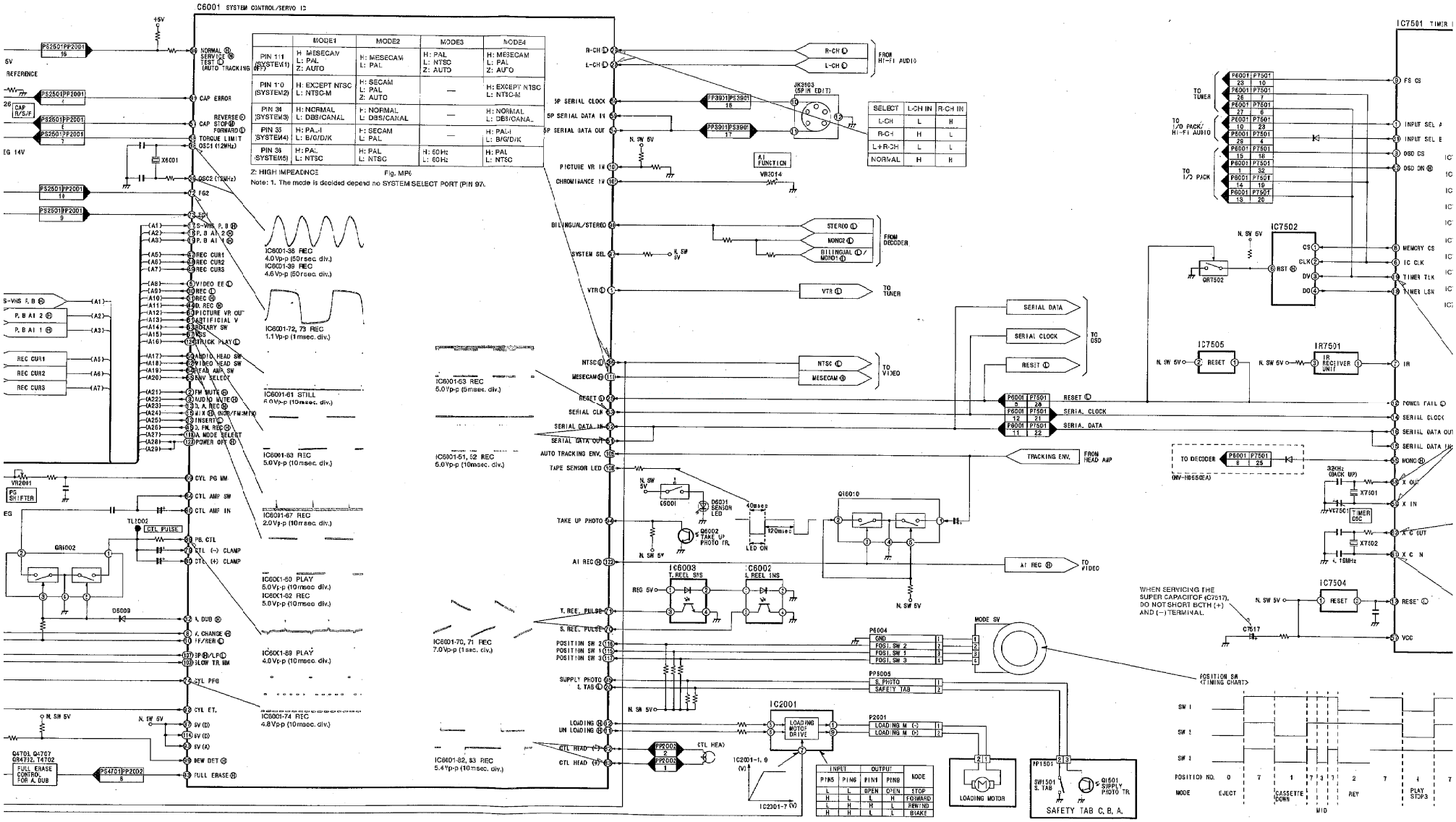


	MODE1	MODE2	MODE3	MODE4
PIN 111 (SYSTEM1)	H: MESECAM L: PAL Z: AUTO	H: MESECAM L: PAL	H: PAL L: NTSC Z: AUTO	H: MESECAM L: PAL Z: AUTO
PIN 110 (SYSTEM2)	H: EXCEPT NTSC L: NTSC-M	H: SECAM L: PAL Z: AUTO	—	H: EXCEPT NTSC L: NTSC-M
PIN 34 (SYSTEM3)	H: NORMAL L: DBS/CANAL	H: NORMAL L: DBS/CANAL	—	H: NORMAL L: DBS/CANAL
PIN 35 (SYSTEM4)	H: PAL-I L: B/G/D/K	H: SECAM L: PAL	—	H: PAL-I L: B/G/D/K
PIN 36 (SYSTEM5)	H: PAL L: NTSC	H: PAL L: NTSC	H: 50Hz L: 60Hz	H: PAL L: NTSC

Z: HIGH IMPEADNCE

Fig. MP8

Note: 1. The mode is decided depend no SYSTEM SELECT PORT (PIN 97).



	MODE1	MODE2	MODE3	MODE4
PIN 1:1 (SYSTEM1)	H: MESECAM L: PAL Z: AUTO	H: MESECAM L: PAL	H: PAL L: NTSC Z: AUTO	H: MESECAM L: PAL Z: AUTO
PIN 1:0 (SYSTEM2)	H: EXCEPT NTSC L: NTSC-M	H: SECAM L: PAL Z: AUTO	—	H: EXCEPT NTSC L: NTSC-M
PIN 34 (SYSTEM3)	H: NORMAL L: DBS/CANAL	H: NORMAL L: DBS/CANAL	—	H: NORMAL L: DBS/CANAL
PIN 33 (SYSTEM4)	H: PAL-I L: B/G/D/K	H: SECAM L: PAL	—	H: PAL-I L: B/G/D/K
PIN 36 (SYSTEM5)	H: PAL L: NTSC	H: PAL L: NTSC	H: 60Hz L: 60Hz	H: PAL L: NTSC

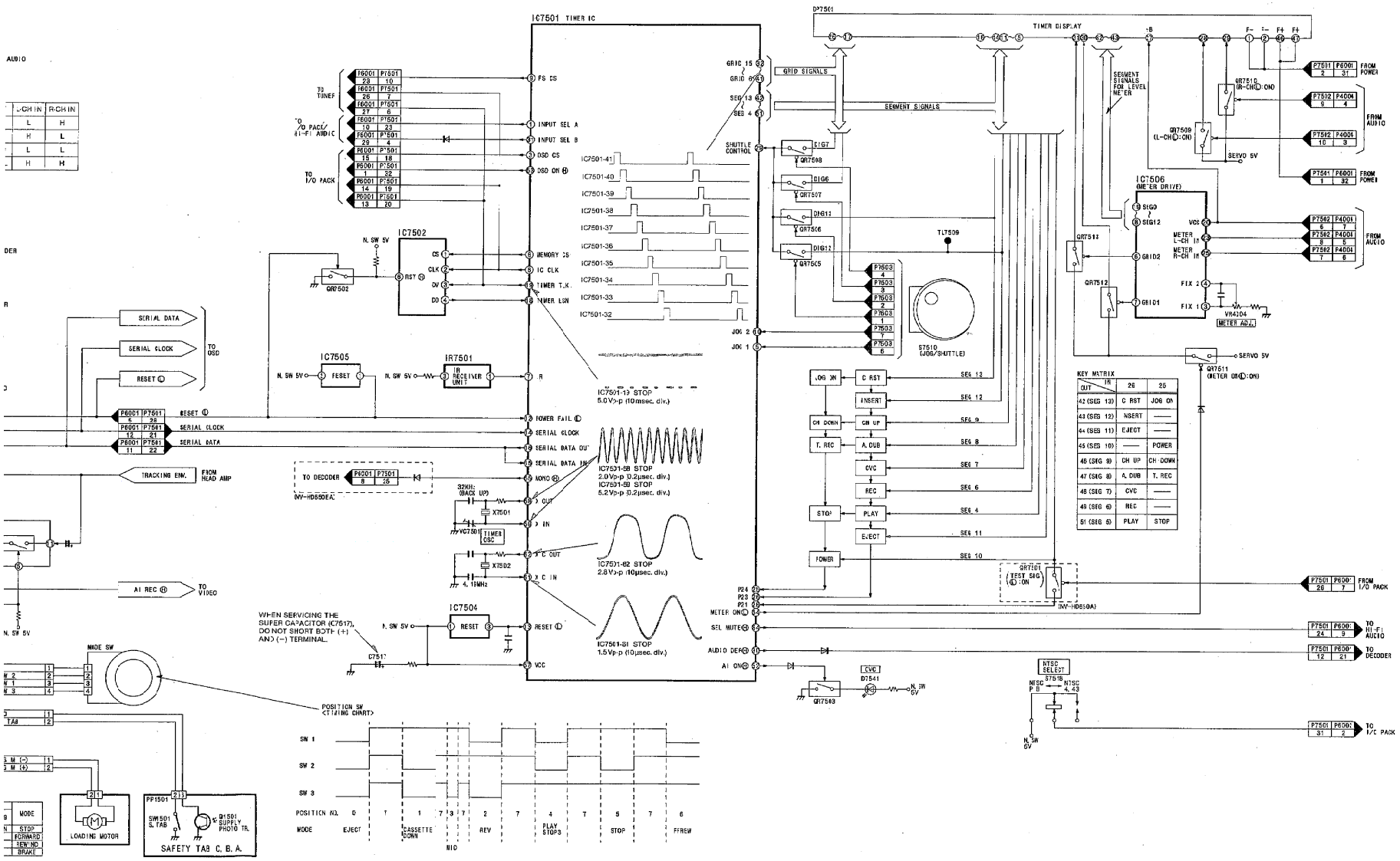
Z: HIGH IMPEADNCE

Note: 1. The mode is decided depend no SYSTEM SELECT PORT (PIN 97).

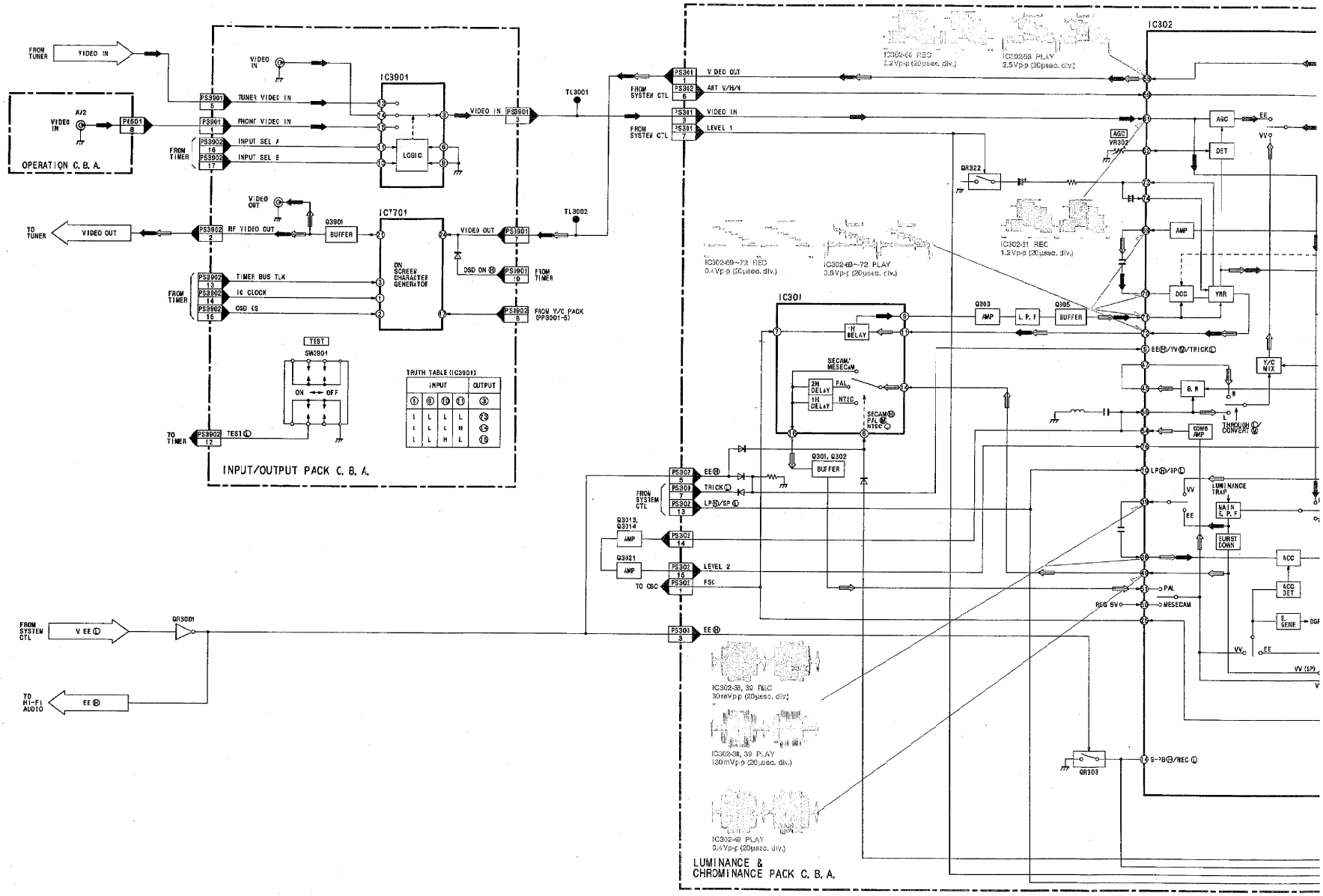
Fig. MP6

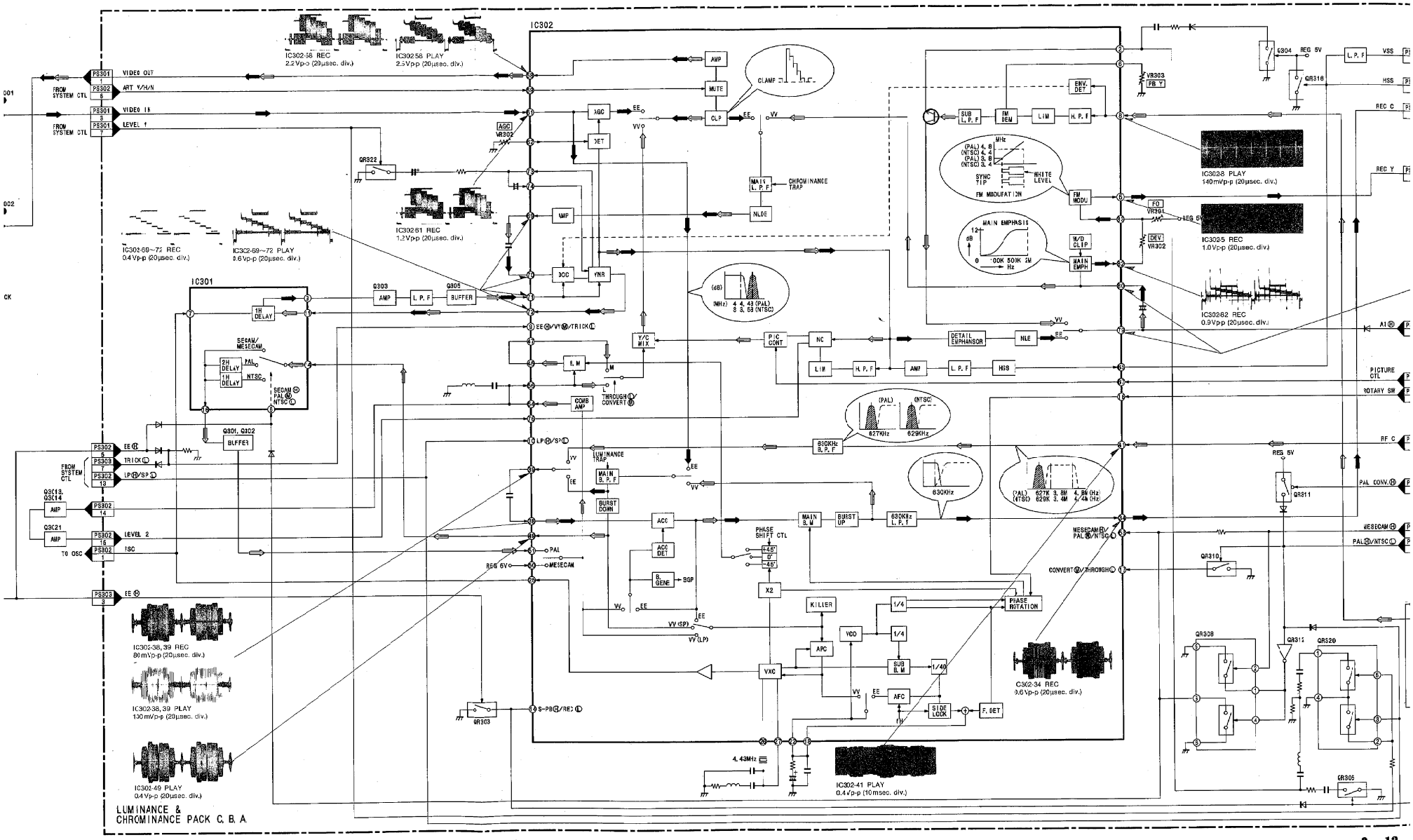
SELECT	L-CH IN	R-CH IN
L-CH	L	H
R-CH	H	L
L+R-CH	L	L
NORMAL	H	H

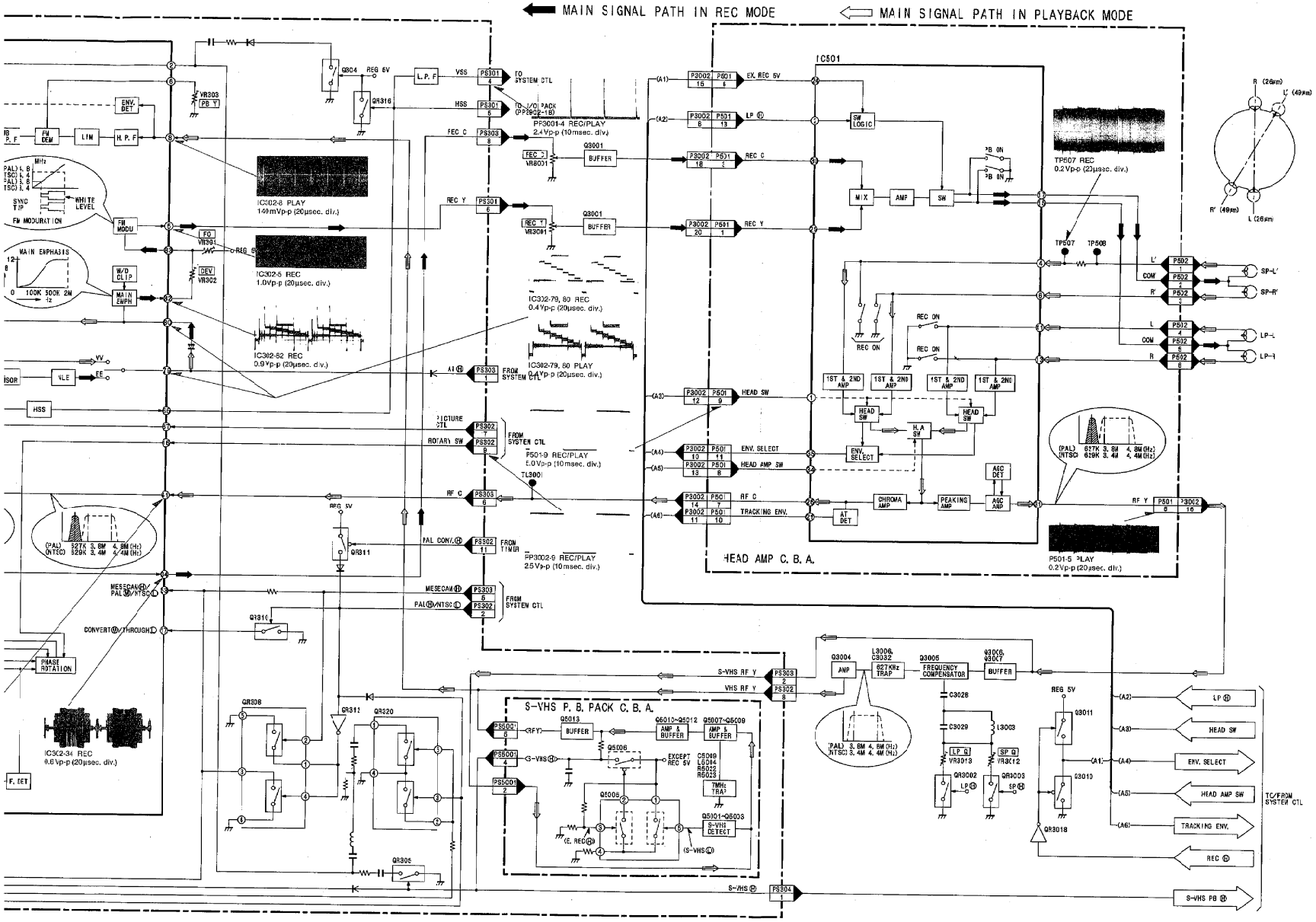
INPUT PIN5	INPUT PIN6	OUTPUT PIN1	OUTPUT PIN8	MODE
L	L	OPEN	OPEN	STOP
H	L	L	H	FOWARD
L	H	H	L	REWIND
H	H	L	L	BRAKE


IC7501 TIMER IC
IC7502
IC7504
IC7505
IC7506 (METER DRIVE)
IR7501 IR RECEIVER UNIT
DP7501
TIMER DISPLAY
GRID SIGNALS
SEGMENT SIGNALS
SEGMENT SIGNALS FOR LEVEL METER
SHUTTLE CONTROL
TL7509
S7510 (JOG/SHUTTLE)
KEY MATRIX
SERIAL DATA
SERIAL CLOCK
RESET
TO OSD
TRACKING ENV.
FROM HEAD AMP
AI REC
TO VIDEO
MODE SW
POSITION SW (TIMING CHART)
LOADING MOTOR
SAFETY TAB C. B. A.
WHEN SERVICING THE SUPER CAPACITOR (C7517), DO NOT SHORT BOTH (+) AND (−) TERMINAL.
FROM POWER
FROM AUDIO
FROM I/O PACK
TO HI-FI AUDIO
TO DECODER
TO I/C PACK
METER ADJ.
SERVO 5V
NTSC SELECT
IC7501-13 STOP 5.0Vp-p (10msec. div.)
IC7501-58 STOP 2.0Vp-p (0.2μsec. div.)
IC7501-59 STOP 5.2Vp-p (0.2μsec. div.)
IC7501-62 STOP 2.8Vp-p (10μsec. div.)
IC7501-81 STOP 1.5Vp-p (10μsec. div.)

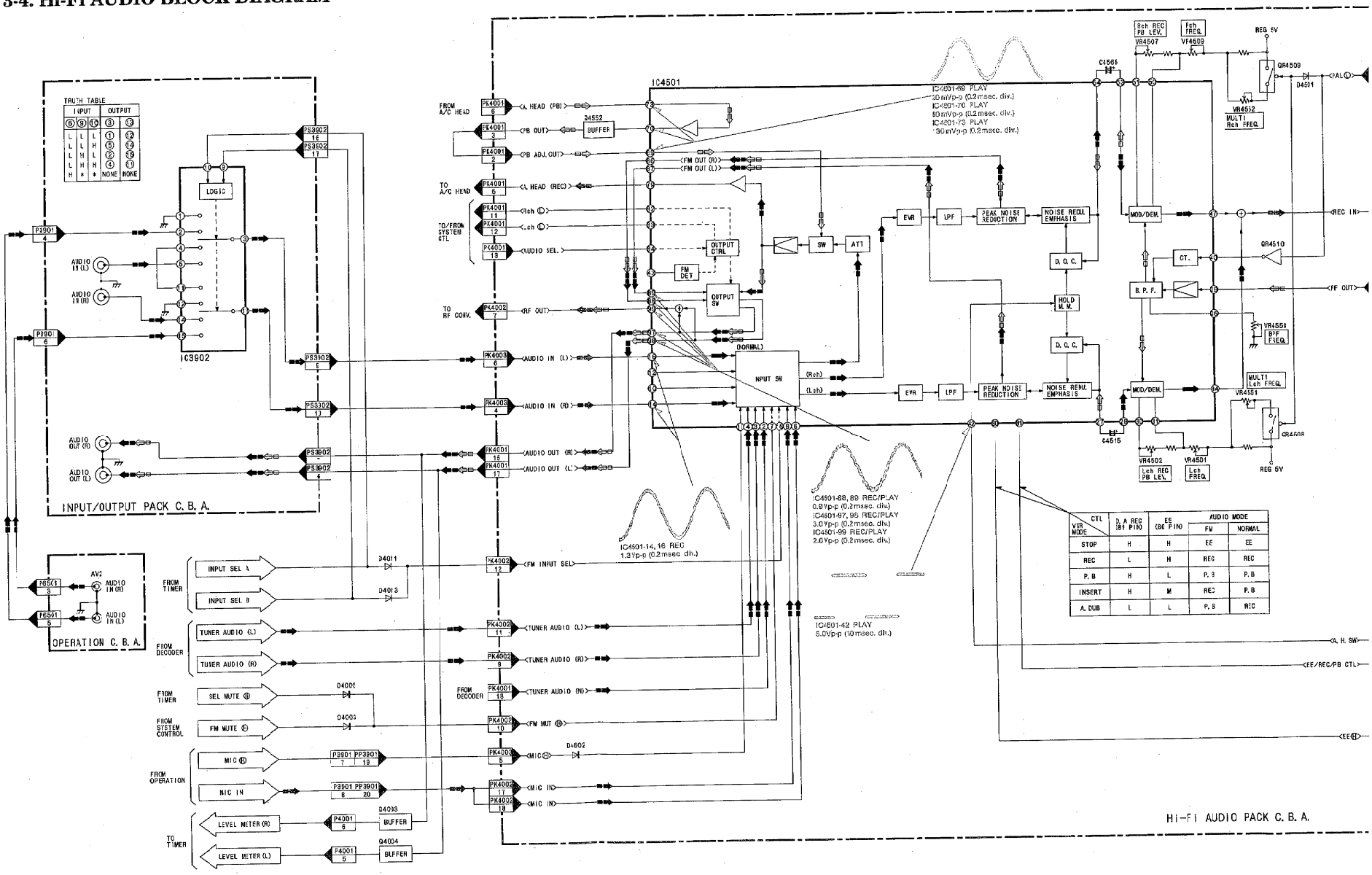
3-3. LUMINANCE & CHROMINANCE BLOCK DIAGRAM



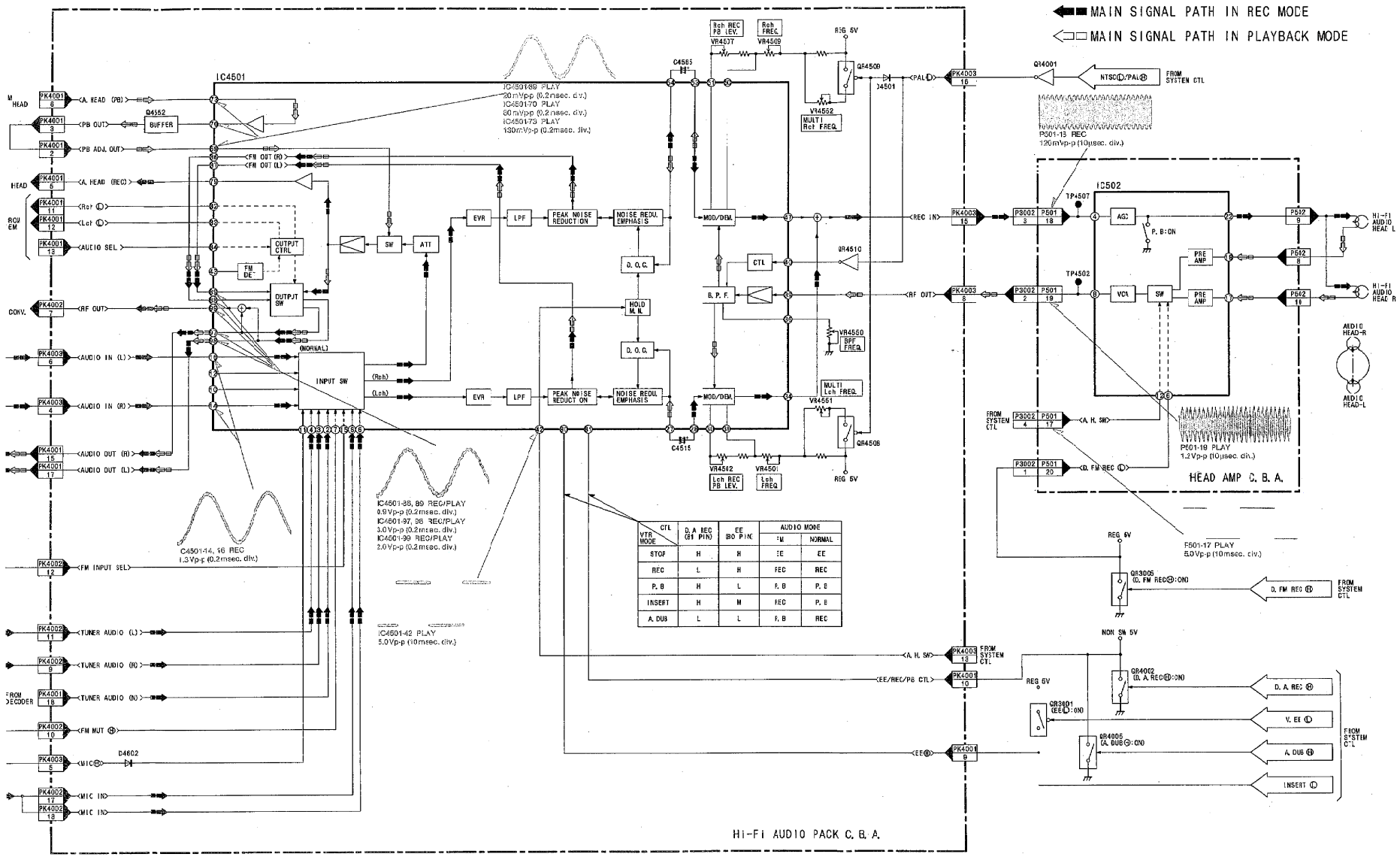

IC302
IC301
IC302-58 REC
2.2Vp-p (20μsec. div.)
IC302-58 PLAY
2.5Vp-p (20μsec. div.)
IC302-61 REC
1.2Vpp (20μsec. div.)
IC302-69~72 REC
0.4Vp-p (20μsec. div.)
IC302-69~72 PLAY
0.6Vp-p (20μsec. div.)
IC302-38, 39 REC
80mVp-p (20μsec. div.)
IC302-38, 39 PLAY
130mVp-p (20μsec. div.)
IC302-49 PLAY
0.4Vp-p (20μsec. div.)
IC302-41 PLAY
0.4Vp-p (10msec. div.)
C302-34 REC
0.6Vp-p (20μsec. div.)
IC302-8 PLAY
140mVp-p (20μsec. div.)
IC302-5 REC
1.0Vp-p (20μsec. div.)
IC302-62 REC
0.9Vp-p (20μsec. div.)
LUMINANCE & CHROMINANCE PACK C. B. A.


MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
IC501
HEAD AMP C. B. A.
S-VHS P. B. PACK C. B. A.
IC302-8 PLAY
140mVp-p (20μsec. div.)
IC302-5 REC
1.0Vp-p (20μsec. div.)
IC302-52 REC
0.9Vp-p (20μsec. div.)
IC302-79, 80 REC
0.4Vp-p (20μsec. div.)
IC302-79, 80 PLAY
0.4Vp-p (20μsec. div.)
PP3001-4 REC/PLAY
2.4Vp-p (10msec. div.)
P501-9 REC/PLAY
5.0Vp-p (10msec. div.)
PP3002-9 REC/PLAY
2.5Vp-p (10msec. div.)
IC302-34 REC
0.6Vp-p (20μsec. div.)
TP507 REC
0.2Vp-p (20μsec. div.)
P501-5 PLAY
0.2Vp-p (20μsec. div.)
TO/FROM SYSTEM CTL
S-VHS PB
HEAD SW
ENV. SELECT
HEAD AMP SW
TRACKING ENV.
REC
LP
SP-L'
SP-R'
LP-L
LP-R

3-4. Hi-Fi AUDIO BLOCK DIAGRAM



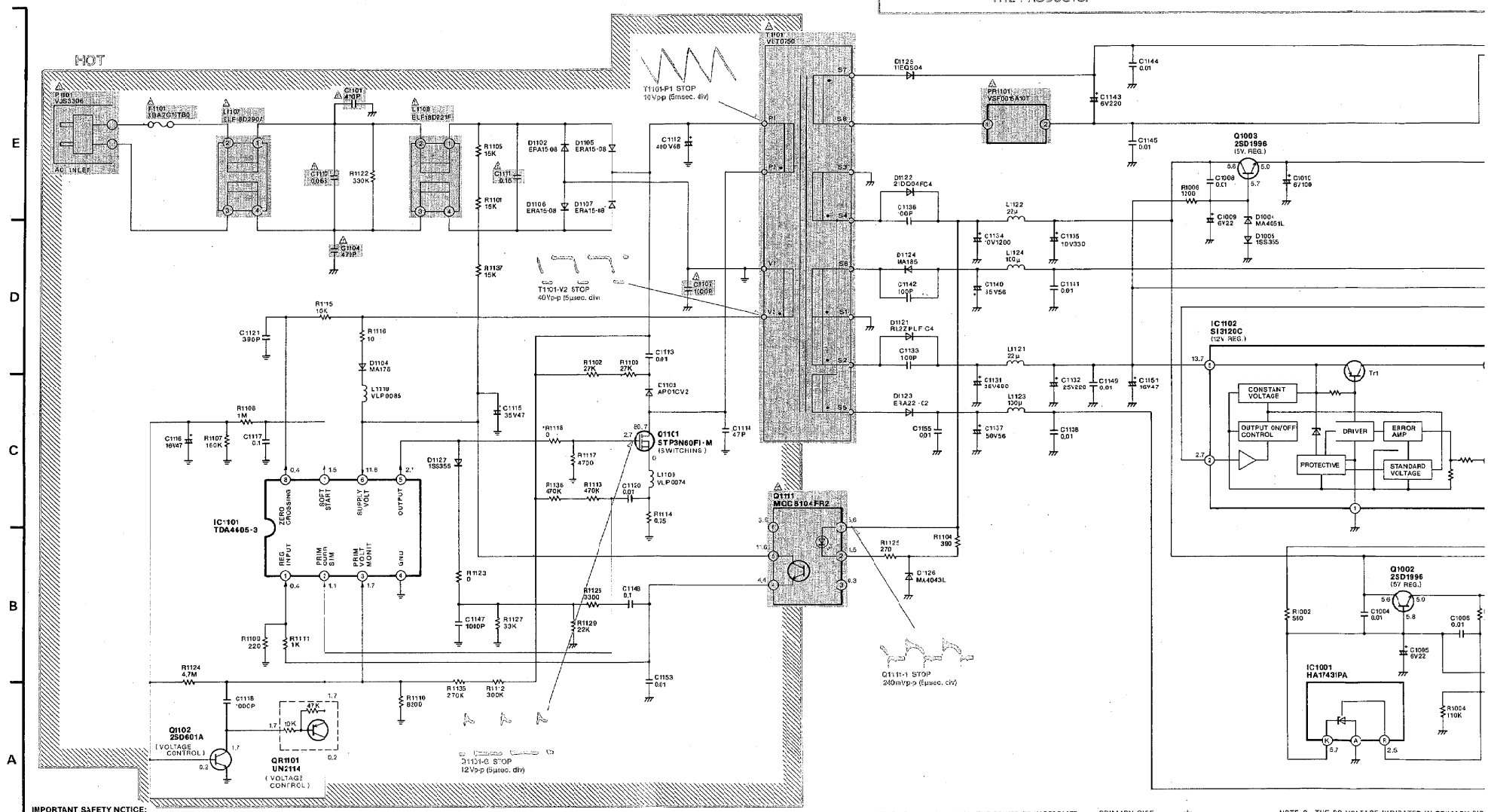
CTL / VTR MODE	D. A REC (81 PIN)	EE (80 PIN)	AUDIO MODE FM	AUDIO MODE NORMAL
STOP	H	H	EE	EE
REC	L	H	REC	REC
P. B	H	L	P. B	P. B
INSERT	H	M	REC	P. B
A. DUB	L	L	P. B	REC



CTL / VTR MODE	D. A REC (81 PIN)	EE (80 PIN)	AUDIO MODE FM	AUDIO MODE NORMAL
STOP	H	H	EE	EE
REC	L	H	REC	REC
P. B	H	L	P. B	P. B
INSERT	H	M	REC	P. B
A. DUB	L	L	P. B	REC

SECTION 4
SCHEMATIC DIAGRAMS
4-1. POWER SUPPLY SECTION IN MAIN SCHEMATIC DIAGRAM

CAUTION THE RED MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICING THE PRODUCTS.



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

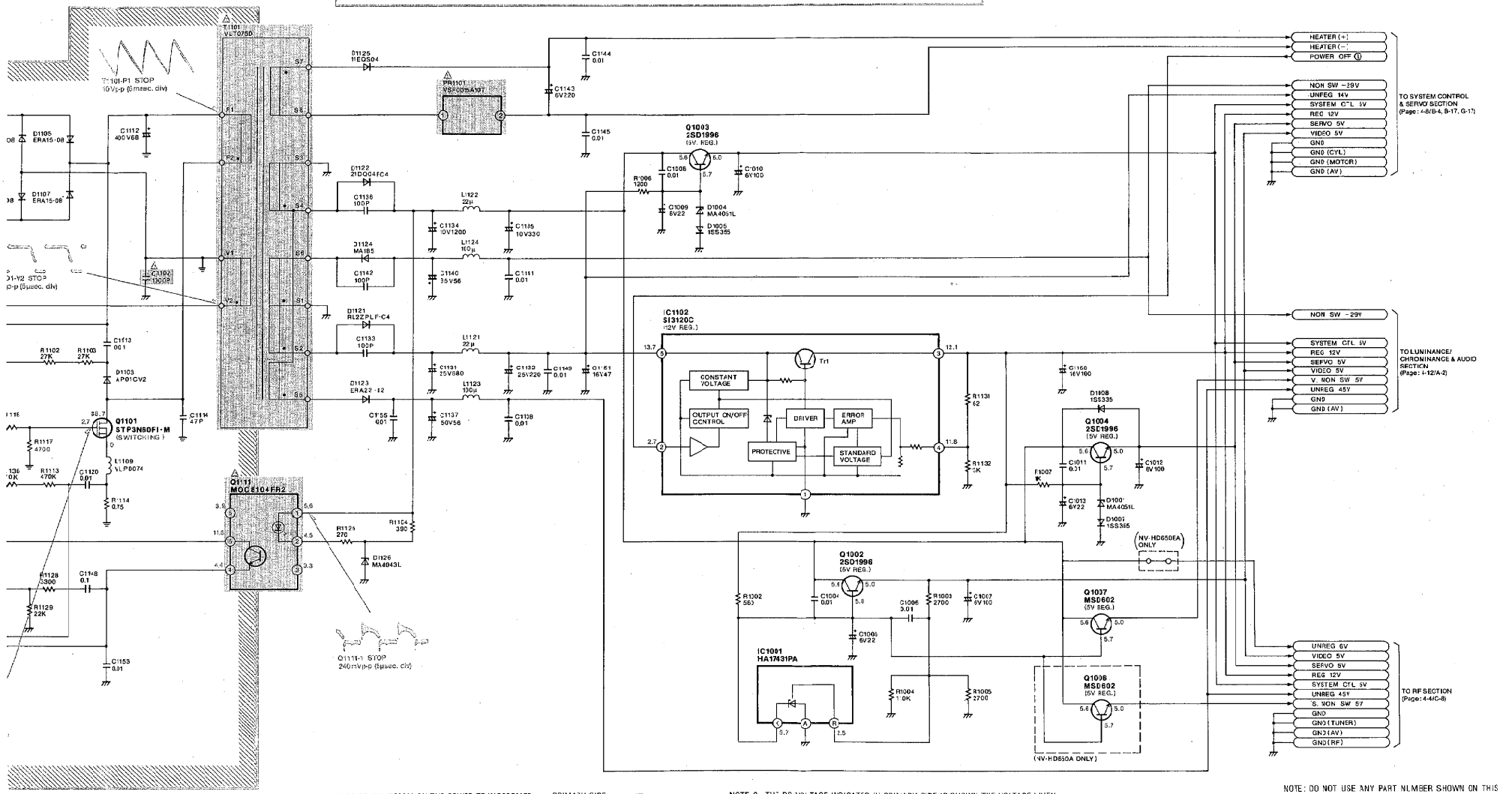
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE ..... ⏚
SECONDARY SIDE ..... ⏚

NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE INPUT AC IS 240V.

AGRAM

CAUTION THE RED MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.



OLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS

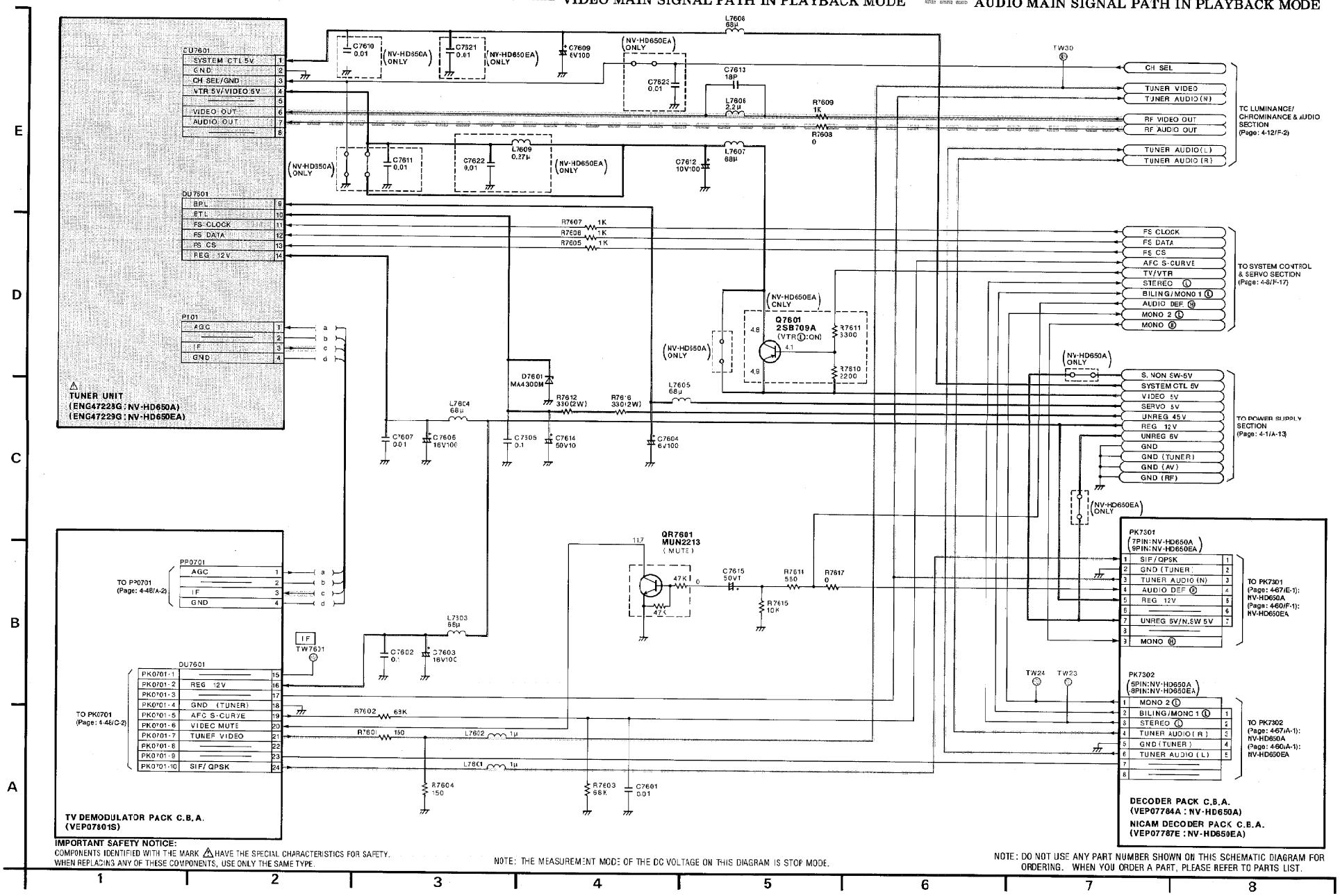
PRIMARY SIDE .....
SECONDARY SIDE ...

NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-2. RF SECTION IN MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10										
STOP	4.9	14.3	14.3	0	0	0	7.3	9.4	5.2	0										
PLAY	5.8	14.1	14.1	0	0	0	7.4	9.3	3.3	0										
REC	1.8	14.1	14.1	0	0	0	7.4	9.3	2.2	0										
F.F	5.1	14.1	14.1	0	0	0	14.1	9.3	4.8	0										
REW	4.1	14.1	14.1	0	0	0	14.1	9.3	4.2	0										

REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.9	0	0	0	0	0	4.9	4.8	0	4.8	0	0	0	0	0	0	0	0	4.8	0
PLAY	0.5	0	0	0	4.9	0	4.9	4.8	0	4.8	0	0	0	0	0	0	0	0	4.8	0
REC	4.9	0	0	0	0	0	4.9	4.8	0	4.8	0	0	4.9	4.9	0	4.9	0	0	0	0
F.F	4.9	0	0	0	0	0	4.9	0	0	0	0	0	0	0	0	0	0	0	0	0
REW	4.9	0	0	0	0	0	4.9	0	0	0	0	0	0	0	0	0	0.8	0	0	0

REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	4.9	0	0	0	0	4.9	0.1	0	4.9	4.9	4.9	4.9	4.9	–	–	4.7
PLAY	0	0	0	0	4.8	0	0	0	0	4.8	0.1	0	4.9	4.8	4.9	4.8	4.9	–	–	4.7
REC	0	0	0	0	4.8	0	0	0	0	0	4.3	0	4.9	4.9	4.9	4.8	4.9	–	–	4.7
F.F	0	0	0	0	4.9	0	0	0	0	4.9	0.1	0	4.9	4.9	4.9	4.8	4.9	–	–	4.7
REW	0	0	0	0	4.9	0	0	0	4.9	4.9	0.1	0	4.9	4.9	4.9	4.8	4.9	–	–	4.7

REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	0	0	0	0	0	0	0	0	4.7	4.5	4.0	4.7	4.9	4.7	2.0	0	0	1.3
PLAY	0	0	0	0	0	0	0	0	0	3.7	4.7	4.6	4.0	4.7	4.8	4.8	0	4.8	0	1.3
REC	0	0	4.9	4.9	4.9	0	0	0	0	0	4.6	4.5	4.0	4.8	4.7	4.7	0	4.9	4.9	2.5
F.F	0	0	0	0	0	0	0	0	0	0	4.6	4.6	4.0	4.9	4.7	4.8	0	4.9	4.9	2.4
REW	0	0	0	0	0	0	0	0	0	0	4.6	4.7	3.9	4.9	4.7	4.8	4.9	4.9	4.9	2.4

REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	4.9	0	0	3.9	0	2.4	0	3.3	4.9	0.1	2.4	2.4	1.3	0	0	2.4	2.4	2.3	2.5
PLAY	0	4.8	3.7	0	3.8	0	2.4	0	3.3	4.9	0.1	2.4	2.4	1.2	0	0	2.4	2.4	2.6	2.5
REC	0	4.7	4.8	0	4.6	0	2.4	0	3.5	4.9	4.9	2.3	2.4	1.4	0	0	2.4	2.4	2.3	2.5
F.F	0	4.8	0	0	2.5	0	2.4	0	3.5	3.4	2.7	2.4	2.4	1.0	0	0	2.4	2.4	2.8	2.3
REW	0	4.8	0	0	2.6	0	2.4	0	3.3	4.7	1.9	2.4	2.4	1.4	0	0	2.4	2.4	2.8	2.3

REF. NO.	IC6001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	4.9	0	0	0	2.5	2.4	0	0	2.4	4.9	1.4	2.3	4.9	5.0	4.9	4.9	5.0	5.1	0	0
PLAY	4.8	0	0	0	2.5	4.8	0	0	0.6	4.9	2.5	2.3	4.9	5.0	4.9	4.9	5.0	5.1	0	0
REC	4.8	3.5	3.7	0	2.4	2.4	0	0	2.4	4.9	2.5	2.3	4.9	5.0	4.8	4.8	5.0	5.1	0	0
F.F	4.8	0	0	0	2.4	2.4	0	0	2.4	4.9	2.4	2.3	4.9	4.9	4.7	4.9	5.0	5.1	0	0
REW	4.8	0	0	0	2.4	2.4	0	0	2.3	4.9	2.4	2.3	4.9	4.9	4.8	4.9	5.0	5.1	0	0

REF. NO.	IC6001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	2.5	3.3	4.6	0	1.8	5.0	4.8	4.9	0	0	0	1.2	2.3	4.9	0	0	5.0	4.9	0	0
PLAY	2.5	3.3	4.5	0	3.6	5.0	4.8	0.1	0	0	0	1.6	1.6	4.9	0	0	4.9	4.9	0	0
REC	2.5	3.3	5.1	0	1.0	5.0	4.8	0.1	0	0	0	2.3	2.3	4.9	0	0	4.9	4.9	0	0
F.F	2.5	3.3	4.5	0	1.6	5.0	4.8	0.1	0	0	0	0.9	0.9	4.9	0	4.9	4.9	4.9	0	0
REW	2.5	3.3	4.5	0	2.7	5.0	4.8	0.1	0	0	0	2.3	2.3	4.9	0	4.9	5.0	4.9	0	0

REF. NO.	IC6001			
MODE	121	122	123	124
STOP	0	0	0	4.9
PLAY	0	0	0	4.9
REC	0	0	0	4.9
F.F	0	0	0	4.9
REW	0	0	0	4.9

REF. NO.	IC6002				IC6003			
MODE	1	2	3	4	1	2	3	4
STOP	1.1	0	4.9	0	2.3	1.2	4.9	0
PLAY	1.1	0	4.9	0	2.3	1.2	4.9	0
REC	1.1	0	4.9	0	2.3	1.2	4.9	0
F.F	1.2	0	2.2	0	2.3	1.2	2.5	0
REW	1.2	0	2.6	0	2.3	1.2	2.8	0

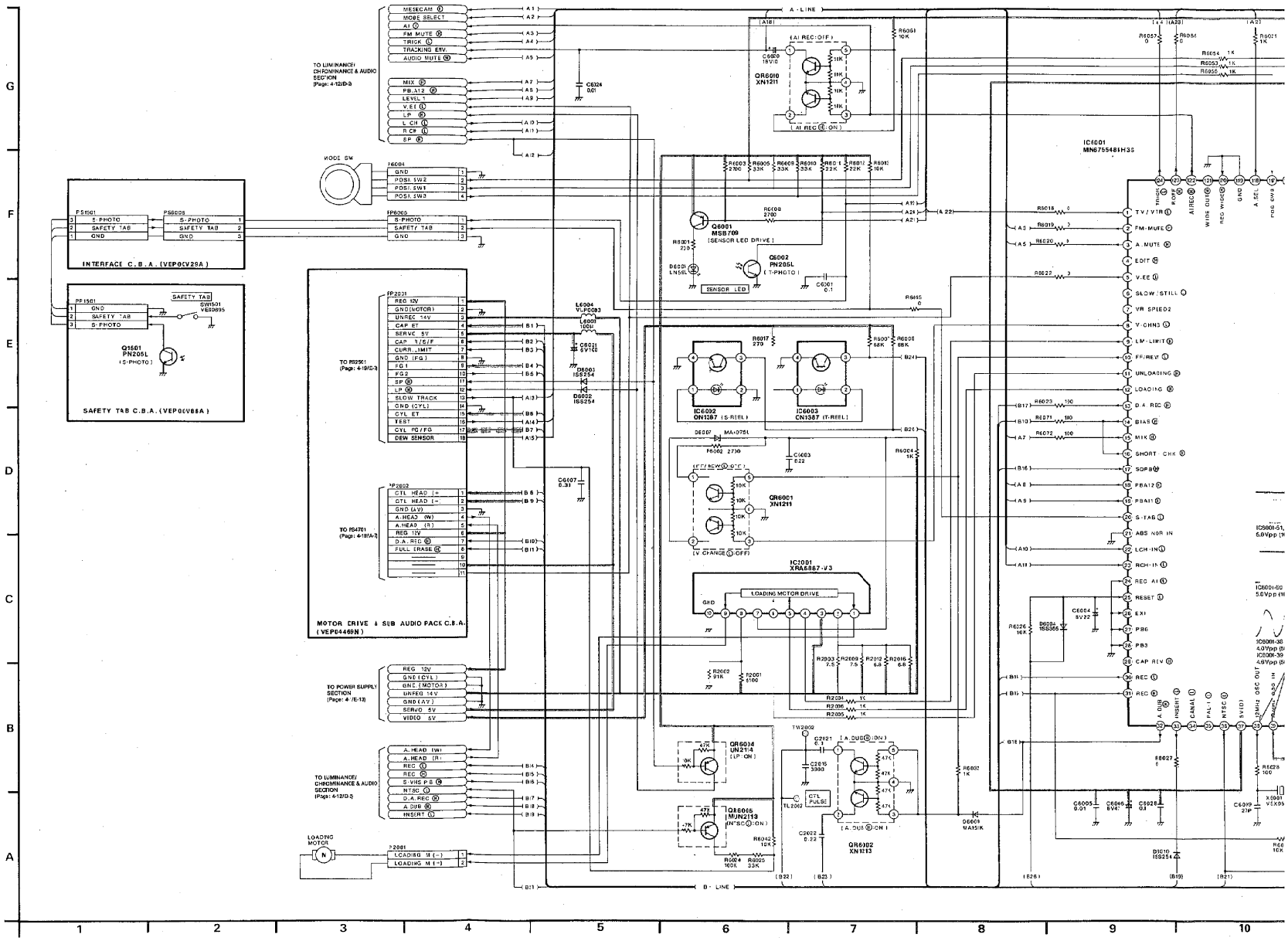
SYSTEM CONTROL & SERVO TR.s DC VOLTAGE CHART (SP MODE)

REF. NO.	Q1501			Q6001			Q6002	
MODE	E	C		E	C	B	E	C
STOP	0	4.9		5.0	0.5	4.9	0	5.0
PLAY	0	4.9		5.0	4.9	4.2	0	4.9
REC	0	4.9		5.0	4.9	4.2	0	4.9
F.F	0	4.8		5.0	4.9	4.2	0	4.9
REW	0	4.8		5.0	4.9	4.2	0	4.9

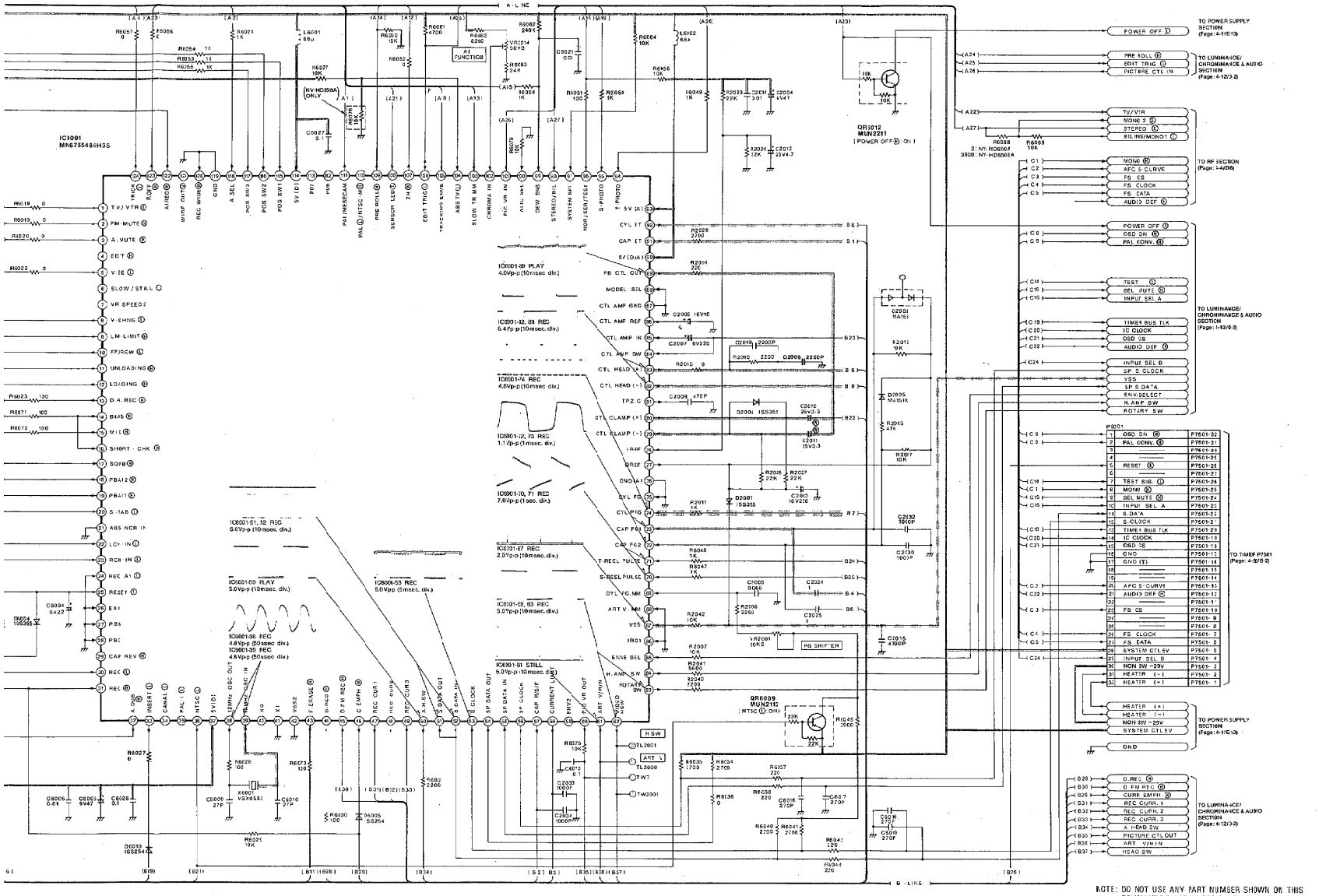
REF. NO.	QR6001						QR6002						QR6004			QR6005		
MODE	1	2	3	4	5		1	2	3	4	5		E	C	B	E	C	B
STOP	0	0	4.8	0	4.6		0	0	4.6	0	4.6		5.0	0.3	4.8	5.0	4.5	4.9
PLAY	0	0	4.8	0	4.6		0	0	4.6	0	4.6		5.0	0.3	4.8	5.0	4.4	4.8
REC	0	0	4.8	0	4.6		0	0	4.6	0	4.6		5.0	0.2	4.8	5.0	5.0	4.8
F.F	14.1	7.6	0	0	0		2.2	1.6	0	0	0		5.0	0.3	4.8	5.0	4.4	4.8
REW	14.1	8.4	0	0	0		2.8	2.2	0	0	0		5.0	0.3	4.8	5.0	4.4	4.8

REF. NO	QR6009			QR6010						QR6012		
MODE	E	C	B	1	2	3	4	5		E	C	B
STOP	5.0	4.8	4.9	0	2.9	0	0	2.9		0	13.0	0
PLAY	5.0	4.8	4.8	0	2.9	0	0	2.9		0	13.0	0
REC	5.0	4.8	4.8	0	2.9	0	0	2.9		0	13.0	0
F.F	5.0	4.8	4.8	0	2.9	0	0	2.9		0	13.0	0
REW	5.0	4.6	4.8	0	2.9	0	0	2.9		0	13.0	0

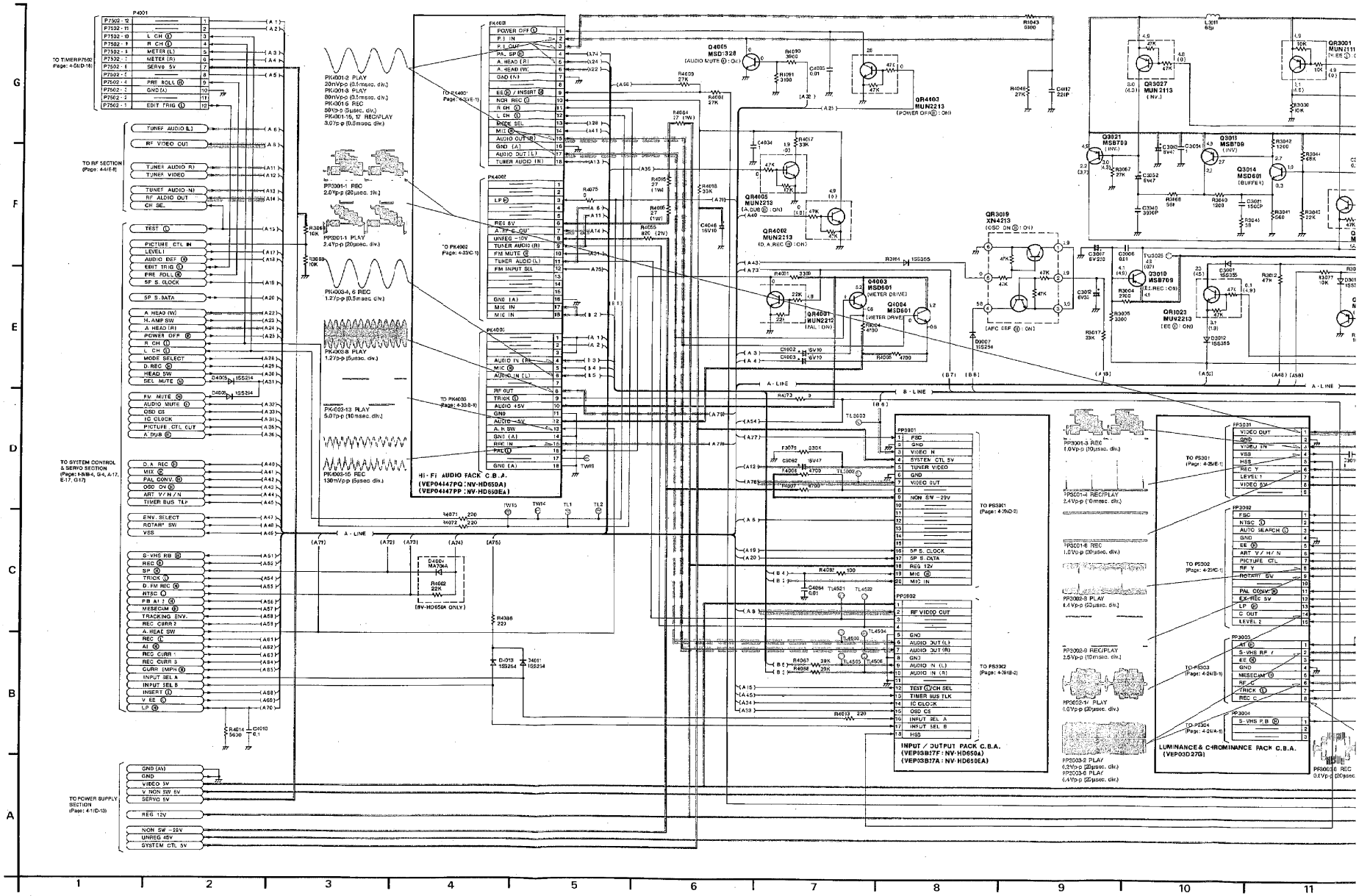
4-3. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM



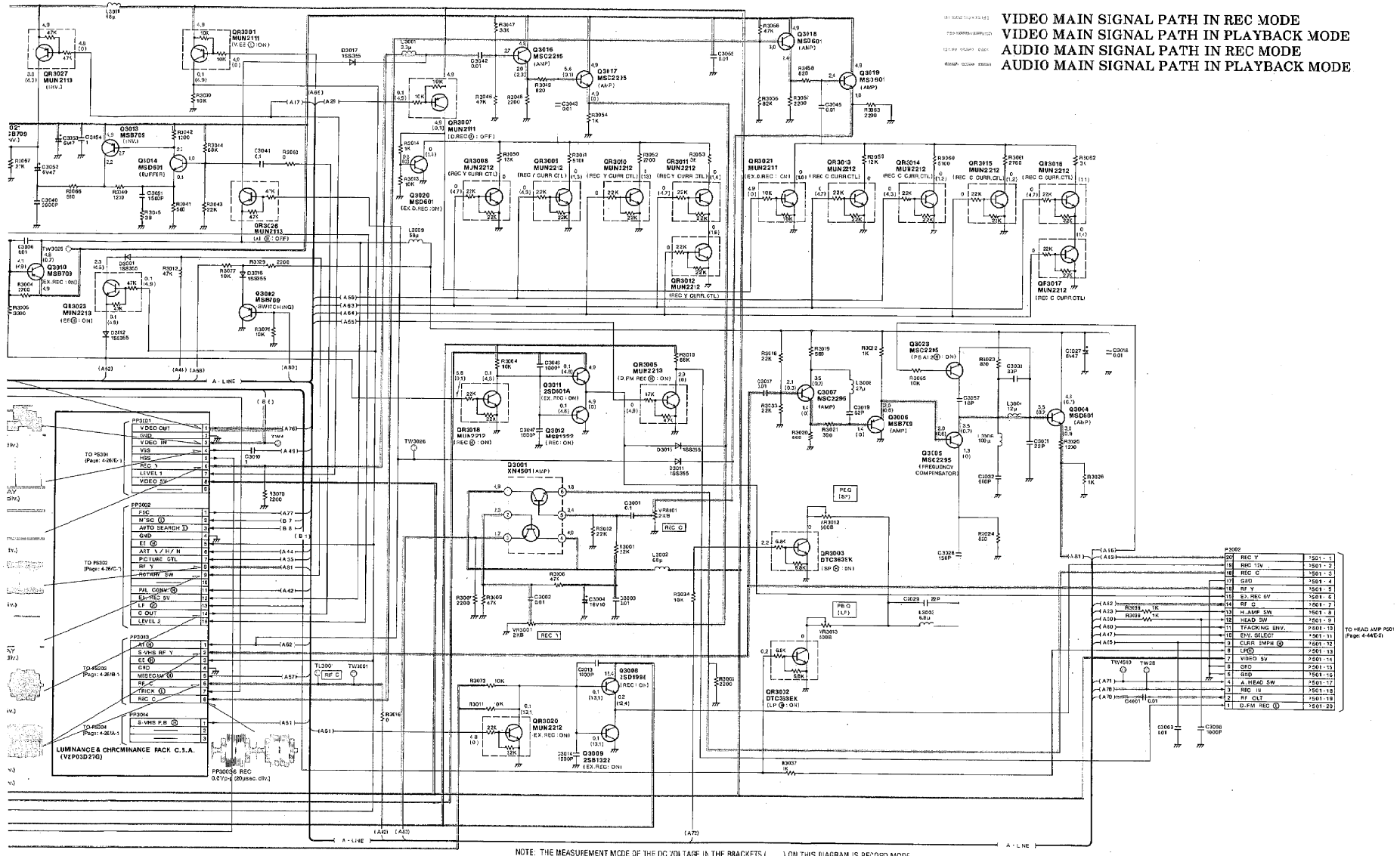
CAPSTAN SERVO SPEED LOOP CAPSTAN SERVO PHASE LOOP CYLINDER SERVO SPEED LOOP CYLINDER SERVO PHASE LOOP



4-4. LUMINANCE/CHROMINANCE & AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM



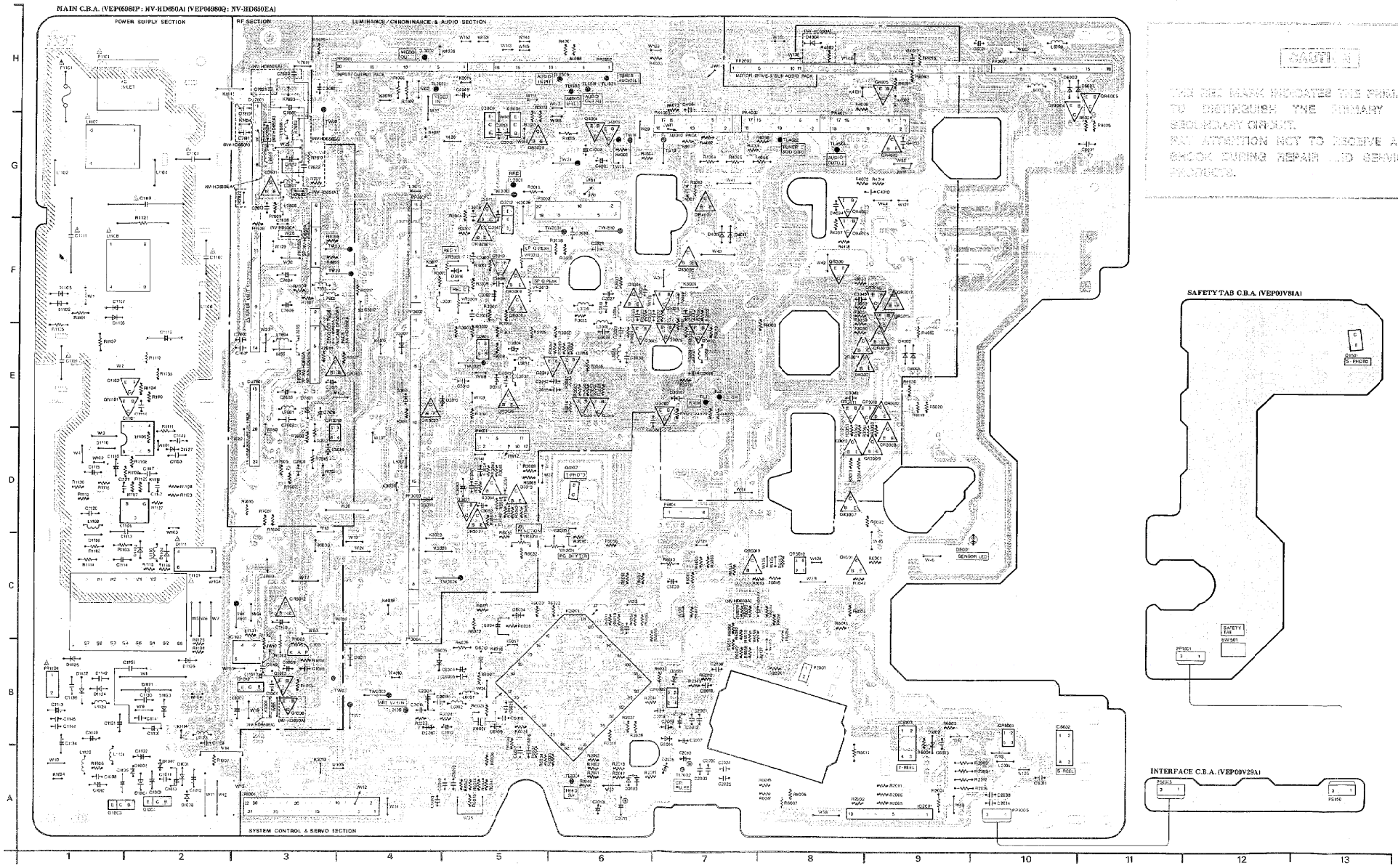
VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

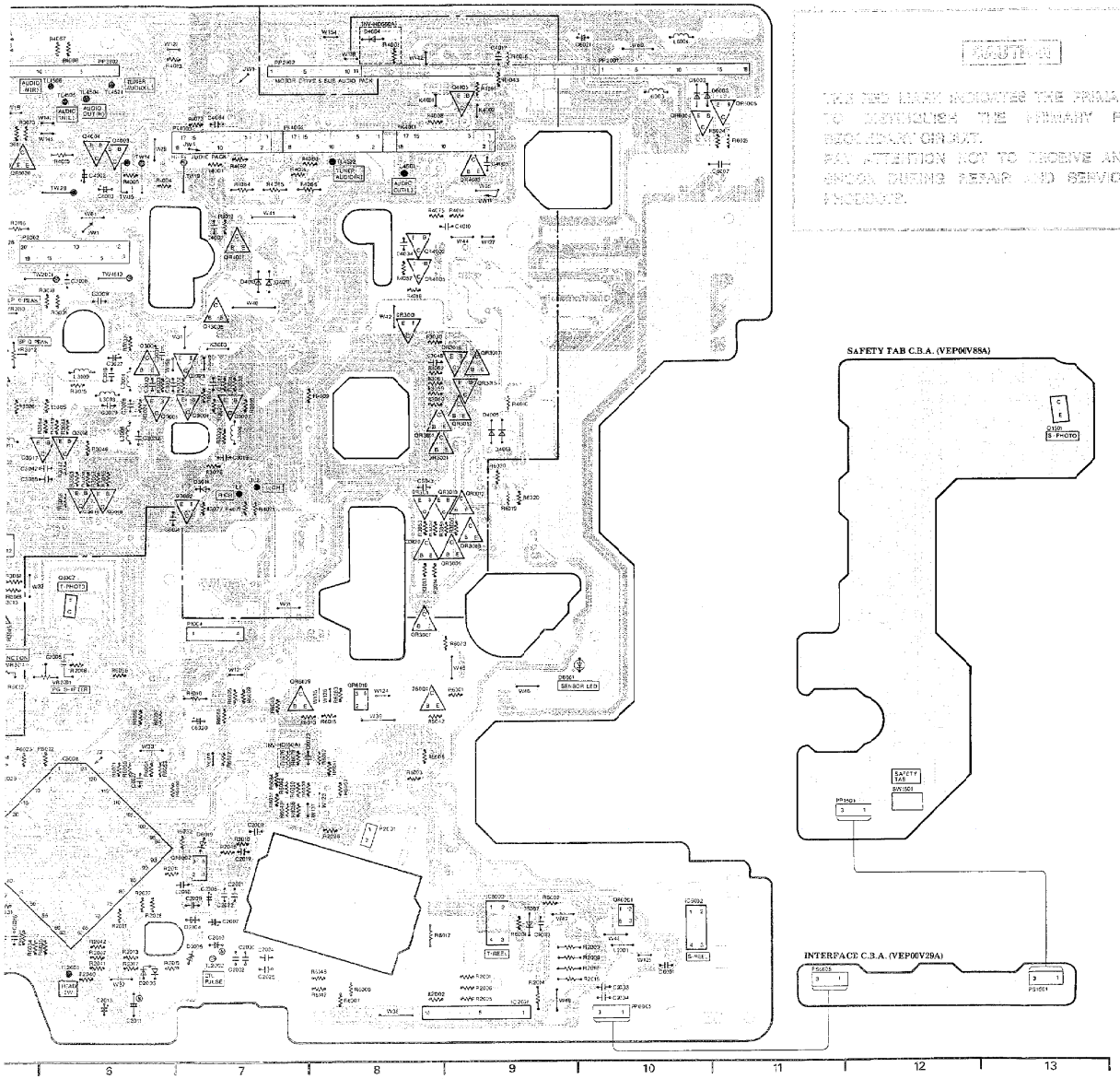
4-5. MAIN C.B.A. (VEP06980P: NV-HD650A) (VEP06980Q: NV-HD650EA)



CAUTION

THE RED MARK INDICATES THE PRIMARY SIDE. TO DISTINGUISH THE PRIMARY FROM SECONDARY SIDE.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF PRODUCTS.

MAIN C.B.A. ADDRESS INFORMATION



CAUTION

THE RED MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

POWER SUPPLY SECTION	
Transistor	
Q1002	B-3
Q1003	A-1
Q1004	A-2
Q1006	B-3
Q1007	B-3
Q1101	D-2
Q1102	E-1
Q1111	C-2
Transistor & Resistor	
QR1101	E-1
Integrated Circuit	
IC1001	B-3
IC1101	D-2
IC1102	B-3

ADDRESS INFORMATION

SYSTEM CONTROL & SERVO SECTION	
Transistor	
Q1501	E-13
Q6001	C-8
Q6002	D-6
Transistor & Resistor	
QR6001	B-10
QR6002	B-7
QR6004	H-10
QR6005	H-11
QR6009	C-7
QR6010	C-8
QR6012	C-3
Integrated Circuit	
IC2001	A-8
IC6001	C-6
IC6002	B-10
IC6003	B-9
Test Point	
TL2001	A-6
TL2002	A-7
TL2009	B-4
TW7	B-4
TW2001	F-6
TW2002	B-4
Adjustment	
VR2001	C-6
Connector	
P2001	B-8
P6001	A-3
P6004	D-7
PP1501	B-12
PP2001	H-10
PP2002	H-7
PP6005	A-10
PS1501	A-13
PS6005	A-11

ADDRESS INFORMATION

RF SECTION	
Transistor	
Q7601	G-3
Transistor & Resistor	
QR7601	E-4
Test Point	
TW23	F-3
TW24	F-3
TW30	G-3
TW7601	C-3
Connector	
PK7301	E-3
PK7302	F-3

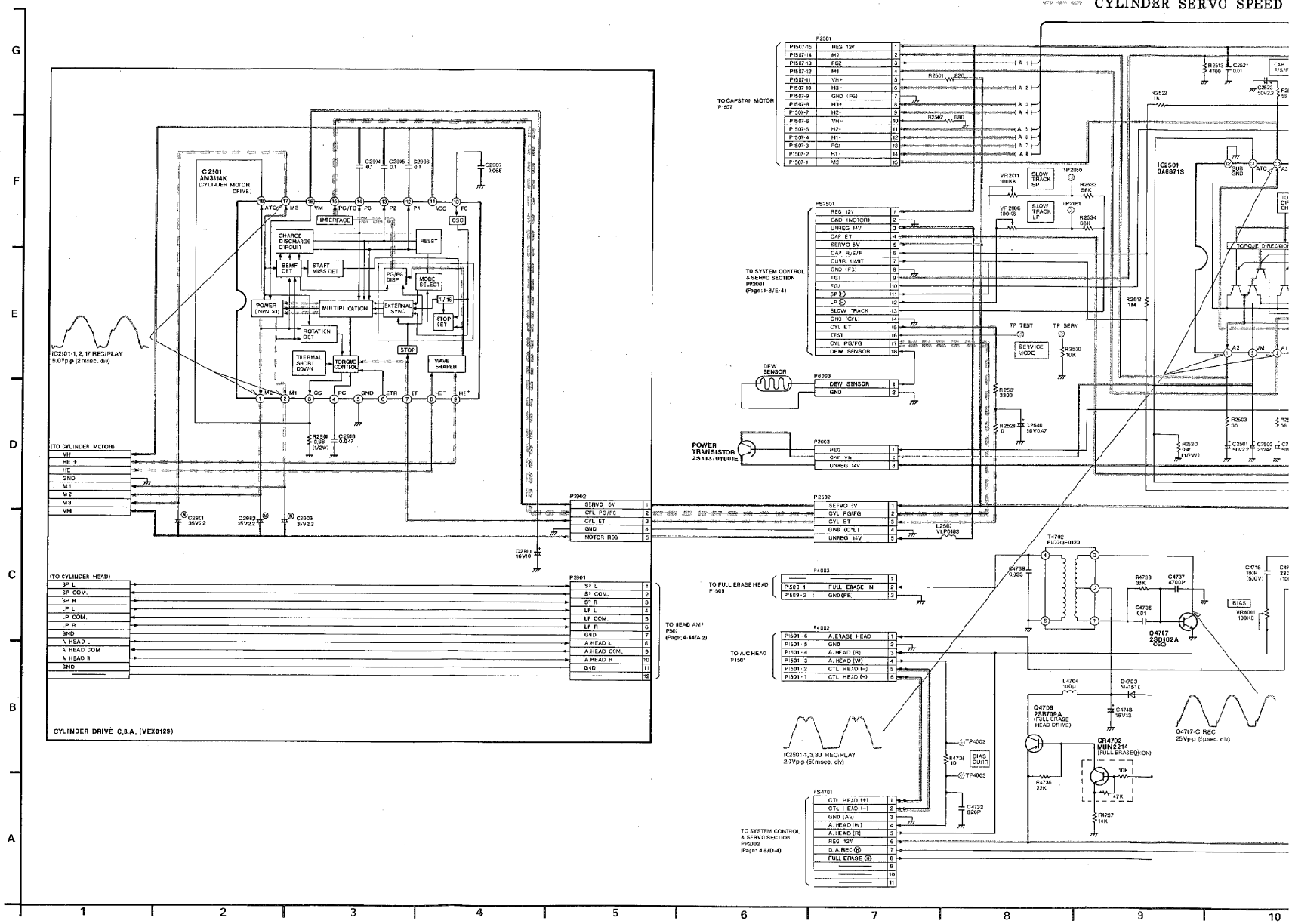
ADDRESS INFORMATION

LUMINANCE/CHROMINANCE & AUDIO SECTION	
Transistor	
Q3001	E-5
Q3002	E-7
Q3004	F-6
Q3005	E-6
Q3006	E-7
Q3007	E-7
Q3008	G-5
Q3009	G-5
Q3010	F-5
Q3011	G-5
Q3012	G-5
Q3013	D-5
Q3014	D-5
Q3016	E-6
Q3017	E-5
Q3018	E-6
Q3019	E-6
Q3020	D-8
Q3021	D-5
Q3023	F-7
Q4003	G-6
Q4004	G-6
Q4005	H-9
Transistor & Resistor	
QR3001	F-8
QR3002	F-5
QR3003	F-5
QR3005	F-7
QR3007	D-8
QR3008	D-9
QR3009	D-9
QR3010	E-9
QR3011	E-8
QR3012	E-9
QR3013	E-9
QR3014	E-8
QR3015	F-9
QR3016	F-9
QR3017	F-9
QR3018	F-5
QR3019	D-3
QR3020	G-5
QR3021	E-8
QR3023	E-4
QR3026	E-5
QR3027	D-5
QR4001	G-7
QR4002	G-8
QR4003	G-9
QR4005	F-8
Test Point	
TL1	E-7
TL2	E-7
TL3001	G-5
TL3002	H-4
TL3003	H-4
TL4503	G-8
TL4504	H-6
TL4505	H-6
TL4506	H-6
TL4521	H-6
TL4522	G-8
TW4	B-3
TW14	G-6
TW15	G-6
TW19	G-7
TW28	G-6
TW3001	G-5
TW3025	E-5
TW3026	C-5
TW4510	F-6
Adjustment	
VR3001	F-5
VR3012	F-5
VR3013	F-5
VR3014	C-5
VR8001	F-5
Connector	
P3002	G-5
P4001	D-5
PP3001	G-4
PP3002	E-4
PP3003	D-4
PP3004	C-4
PP3901	H-4
PP3902	H-6
PK4001	G-8
PK4002	G-7
PK4003	G-7

ADDRESS INFORMATION

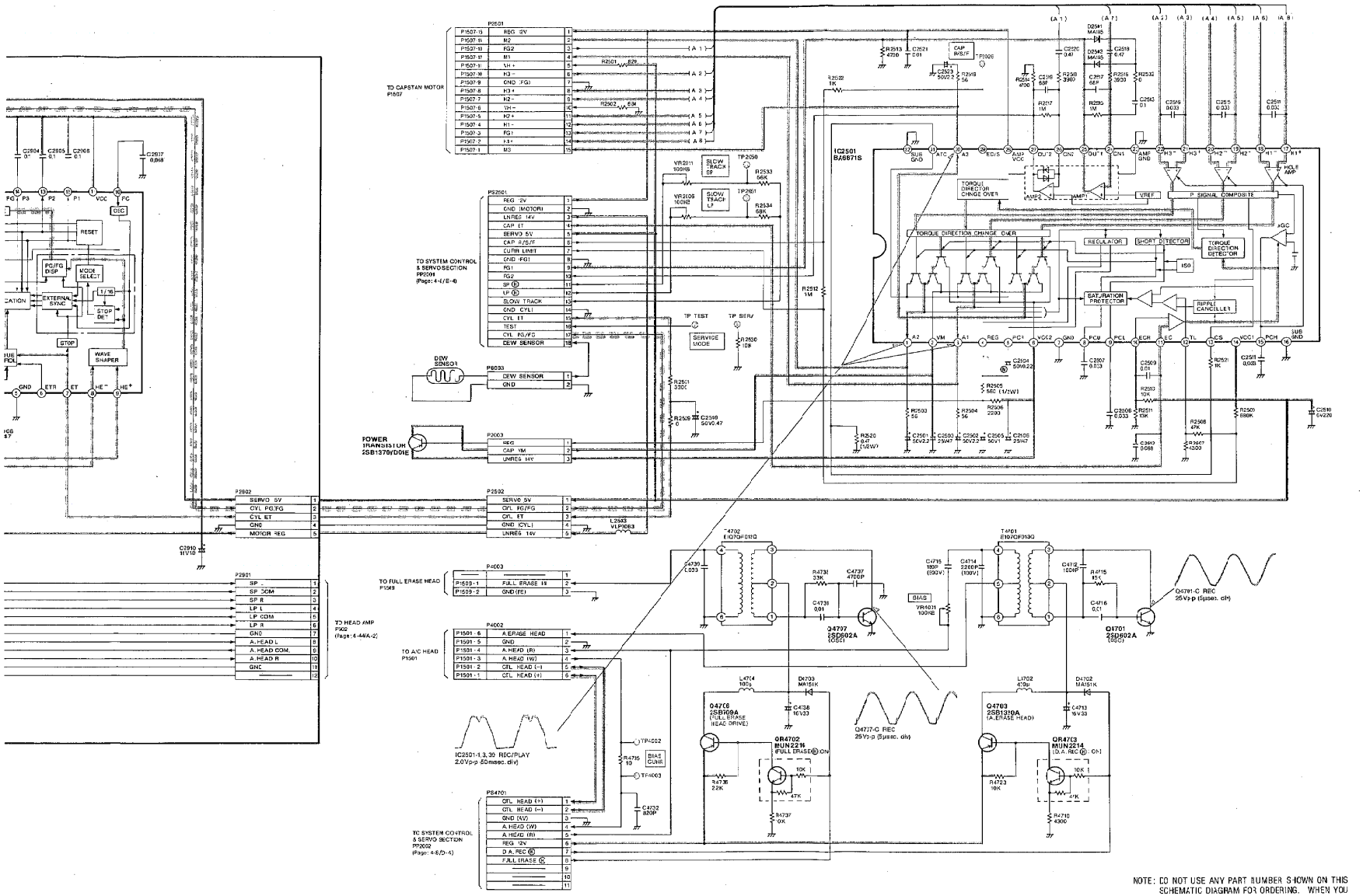
4-6. MOTOR DRIVE & SUB AUDIO PACK SCHEMATIC DIAGRAM

CAPSTAN SERVO SPEED I
CYLINDER SERVO SPEED



PACK SCHEMATIC DIAGRAM

CAPSTAN SERVO SPEED LOOP
CYLINDER SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO PHASE LOOP



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART PLEASE REFER TO PARTS LIST.

MOTOR DRIVE & SUB AUDIO PACK ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC2501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.6	4.4	0.6	13.2	0.1	13.9	0	4.5	0.7	2.8	0.2	0.4	0	4.9	1.5	0	2.3	2.3	2.3	2.2
PLAY	2.6	4.3	2.6	12.4	1.9	13.6	0	0.7	0.7	2.8	2.5	0.4	0.1	4.9	1.5	0	2.3	2.3	2.3	2.3
REC	2.7	4.3	2.7	12.4	2.0	13.6	0	0.7	0.7	2.8	2.5	0.4	0.1	5.0	1.5	0	2.3	2.3	2.3	2.3
F.F	7.5	13.4	7.5	4.3	11.6	13.5	0.1	0.8	0.8	2.8	2.0	0.5	0.2	4.9	1.5	0	2.3	2.3	2.3	2.3
REW	7.0	13.5	7.0	6.9	11.7	13.6	0	0.7	0.8	2.8	2.3	0.5	0.1	4.9	1.5	0	2.3	2.3	2.3	2.3

REF. NO.	IC2501											
MODE	21	22	23	24	25	26	27	28	29	30	31	32
STOP	2.2	2.3	0	6.3	6.3	6.3	6.3	12.3	2.0	0.6	0	0
PLAY	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	0	2.6	0	0
REC	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	0	2.6	0.1	0
F.F	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	0	7.5	0.2	0
REW	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	4.9	7.4	0.2	0

REF. NO.	IC2901																	
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
STOP	13.1	13.1	0.1	0.6	0	2.5	2.4	2.6	2.5	2.6	4.9	3.7	3.6	3.7	1.3	13.8	13.3	0.1
PLAY	13.8	12.8	0.2	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.7	3.7	3.7	1.4	13.6	13.7	0.2
REC	13.7	13.7	0.2	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.8	3.7	3.7	1.5	13.6	13.7	0.2
F.F	13.8	13.8	0.1	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.8	3.7	3.7	1.5	13.5	13.7	0.1
REW	13.8	13.8	0.2	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.7	3.7	3.7	1.5	13.5	13.7	0.2

MOTOR DRIVE & SUB AUDIO PACK PINs DC VOLTAGE CHART (SP MODE)

REF. NO.	PS2501																	
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
STOP	12.3	0	13.8	0.2	4.9	2.0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	5.0	1.4	0
PLAY	12.3	0	13.6	2.5	4.9	0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4	0
REC	12.3	0	13.6	2.5	4.9	0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4	0
F.F	12.3	0	13.5	2.1	4.9	0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4	0
REW	12.3	0	13.5	2.1	4.9	4.9	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4	0

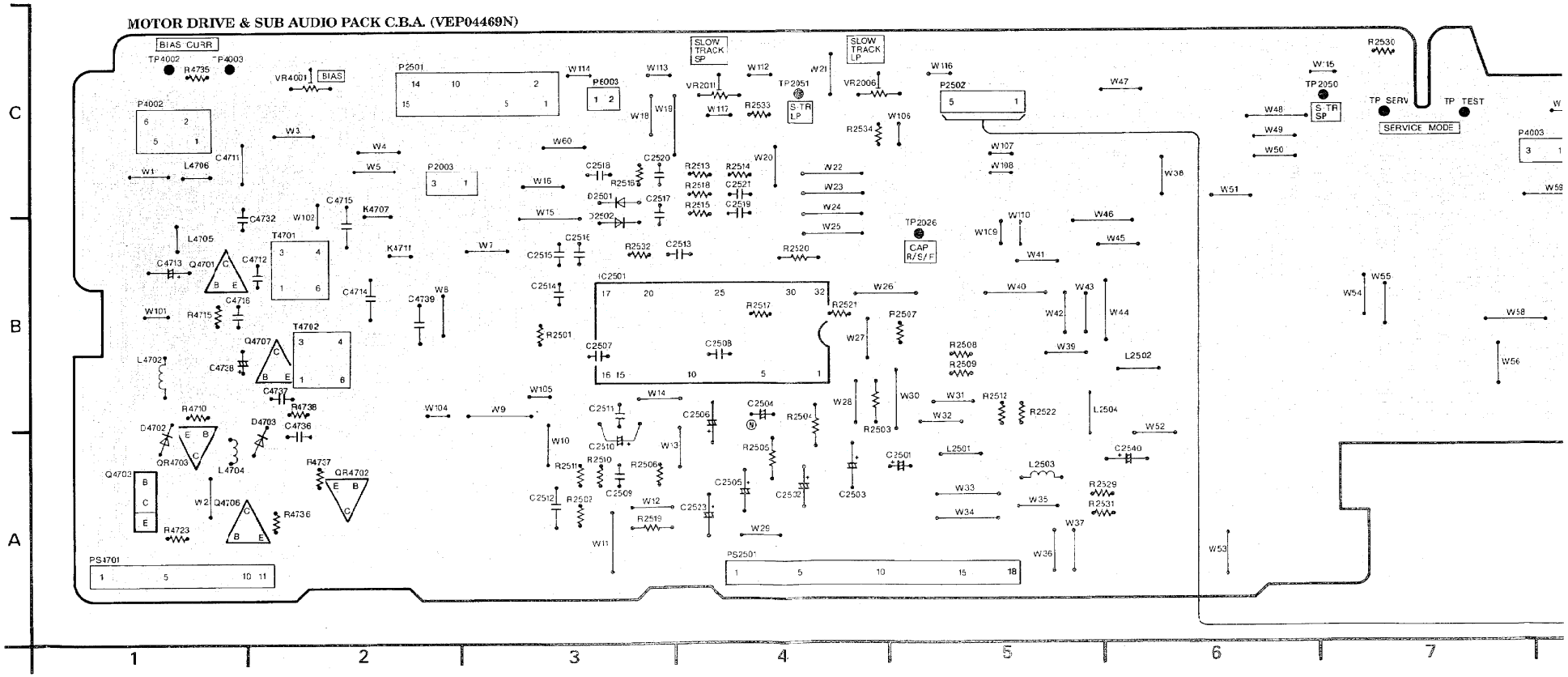
REF. NO.	PS4701										
MODE	1	2	3	4	5	6	7	8	9	10	11
STOP	0	0	0	0	0	12.3	0	0	0	4.9	0
PLAY	0	0	0	0	0	12.3	0	0	0	0	4.9
REC	3.5	3.5	0	0	0	12.3	4.9	4.7	0	4.9	0
F.F	0	0	0	0	0	12.3	0	0	0	4.9	0
REW	0	0	0	0	0	12.3	0	0	0	4.9	0

MOTOR DRIVE & SUB AUDIO PACK TR.s DC VOLTAGE CHART (SP MODE)

REF. NO.	Q4701			Q4703			Q4706			Q4707		
MODE	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0.2	0.2	12.3	0.3	12.3	12.5	0.4	12.5	0	0.4	0.3
PLAY	0	0.3	0.3	12.3	0.3	12.3	12.5	0.4	12.5	0	0.4	0.3
REC	0	11.3	−1.4	12.3	11.9	11.9	12.5	12.5	11.7	0	12.2	0
F.F	0	0.3	0.3	12.3	0.3	12.3	12.5	0.4	12.5	0	0.4	0.3
REW	0	0.3	0.3	12.3	0.3	12.3	12.5	0.4	12.5	0	0.4	0.3

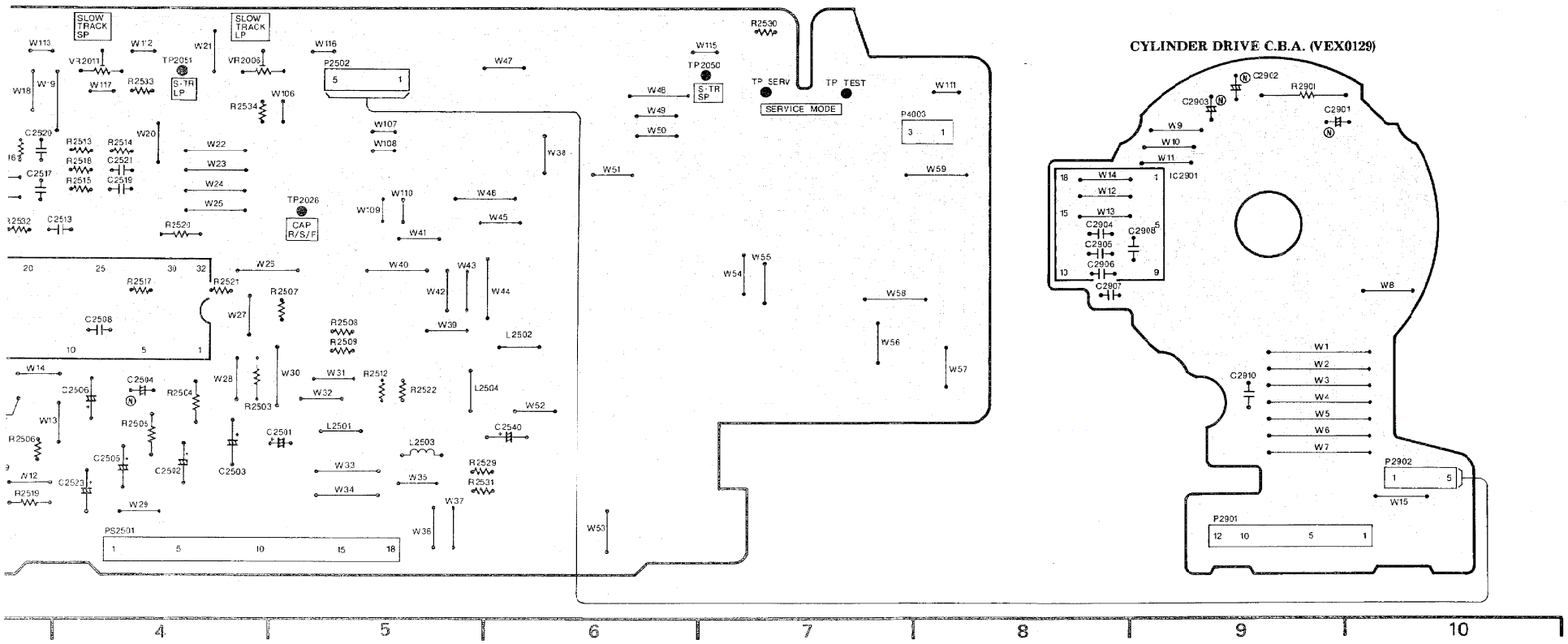
REF. NO.	QR4702			QR4703		
MODE	E	C	B	E	C	B
STOP	0	12.5	0	0	12.3	0
PLAY	0	12.5	0	0	12.3	0
REC	3.6	11.7	4.7	4.1	11.5	4.9
F.F	0	12.5	0	0	12.3	0
REW	0	12.5	0	0	12.3	0

4-7. MOTOR DRIVE & SUB AUDIO PACK C.B.A. (VEP04469N)

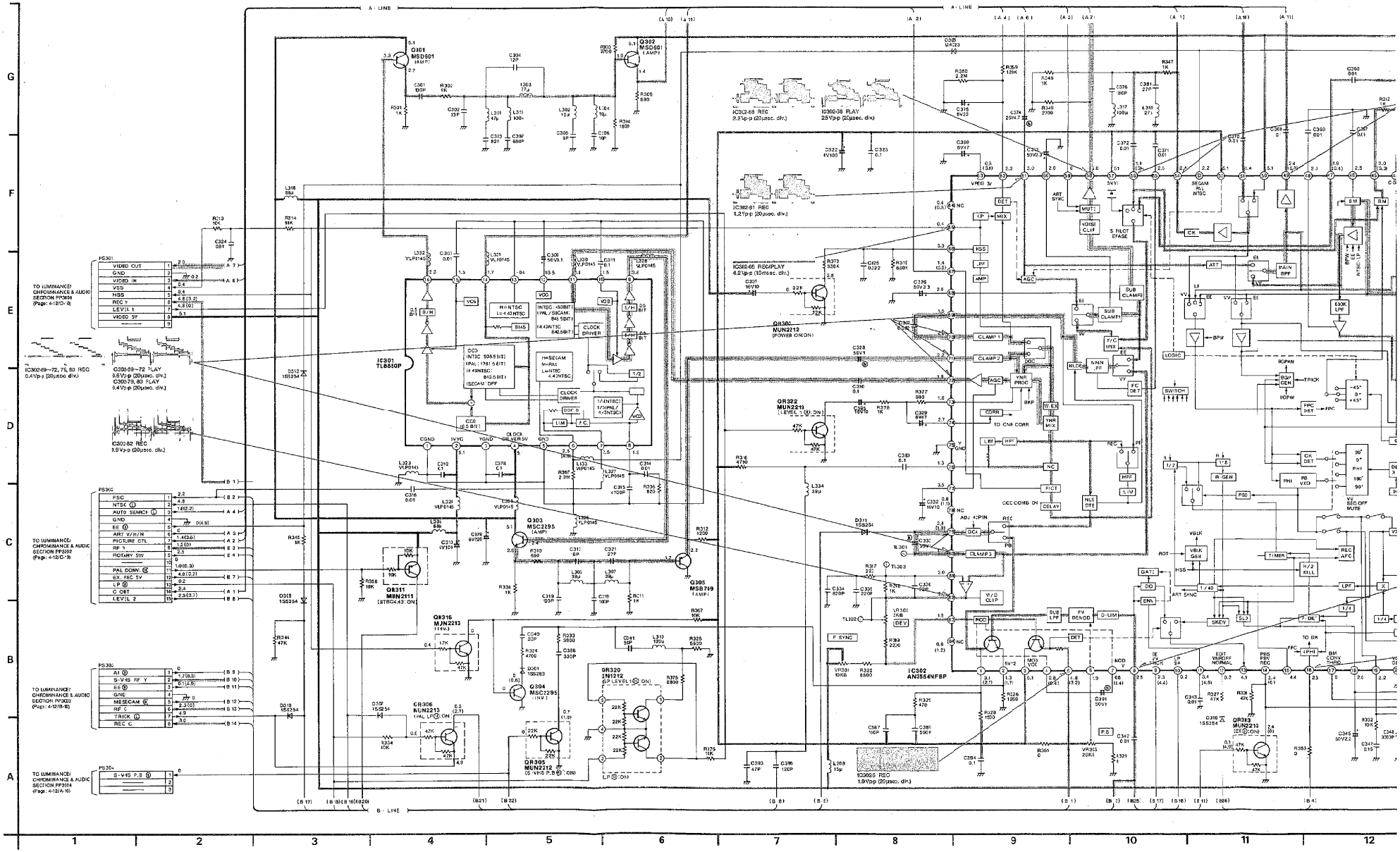


MOTOR DRIVE & SUB AUDIO PACK C.B.A.			
Transistor		**Adjustment**	
Q4701	B-1	VR2006	C-4
Q4703	A-1	VR2011	C-4
Q4706	A-1	VR4001	C-2
Q4707	B-2	**Connector**	
Transistor & Resistor		P2003	C-2
QR4702	A-2	P2501	C-2
QR4703	A-1	P2502	C-5
Integrated Circuit		P2901	A-9
IC2501	B-3	P2902	A-10
IC2502	B-8	P4002	C-1
Test Point		P4003	C-7
TP2026	B-5	P6003	C-3
TP2050	C-7	PS2501	A-4
TP2051	C-4	PS4701	A-1
TP4002	C-1		
TP4003	C-1		
TP SERV	C-7		
TP TEST	C-7		

ADDRESS INFORMATION

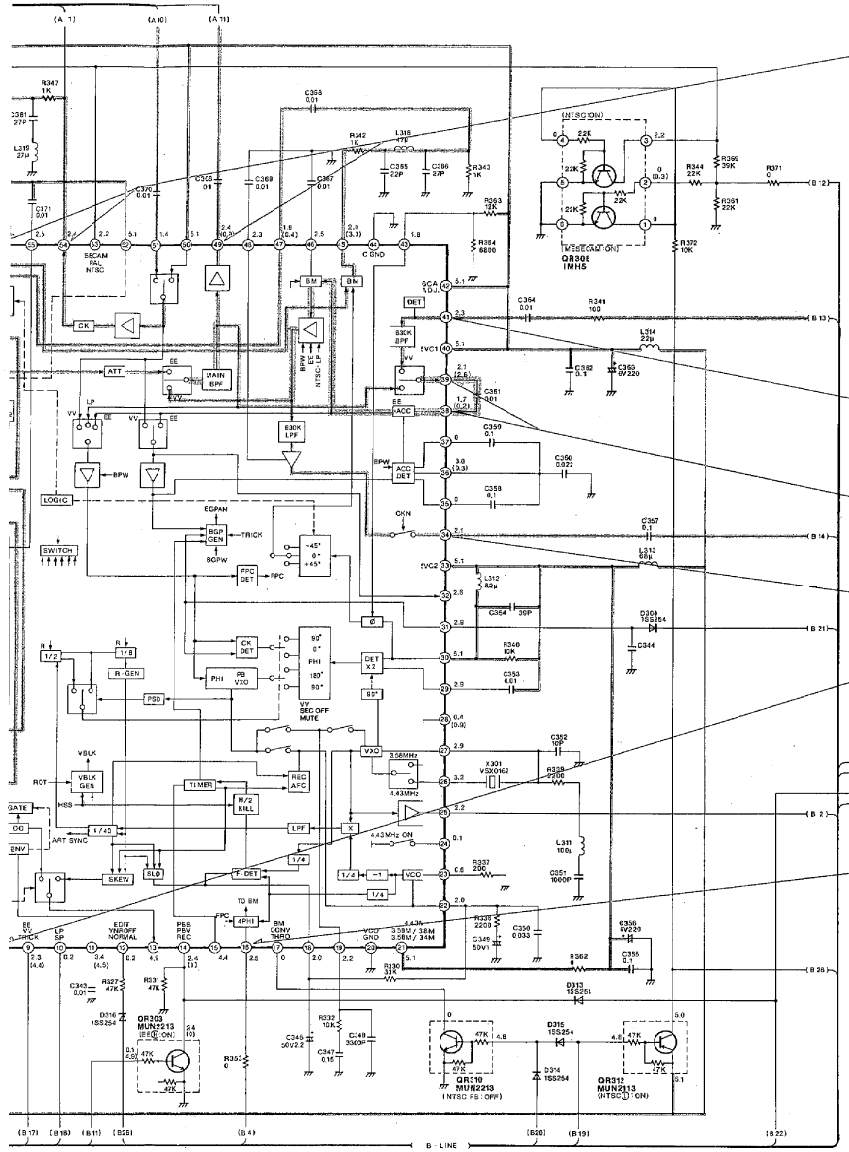


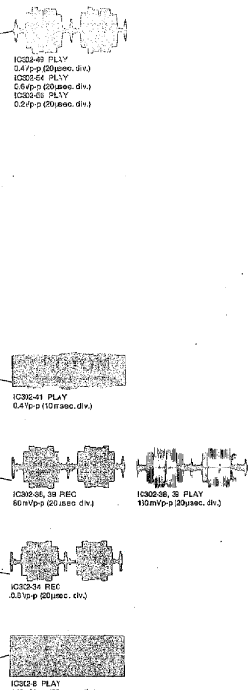
4-8. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM

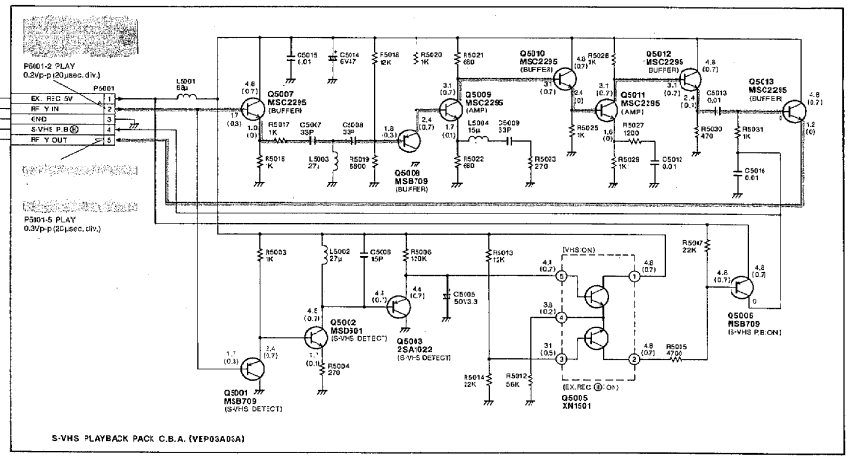


MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE



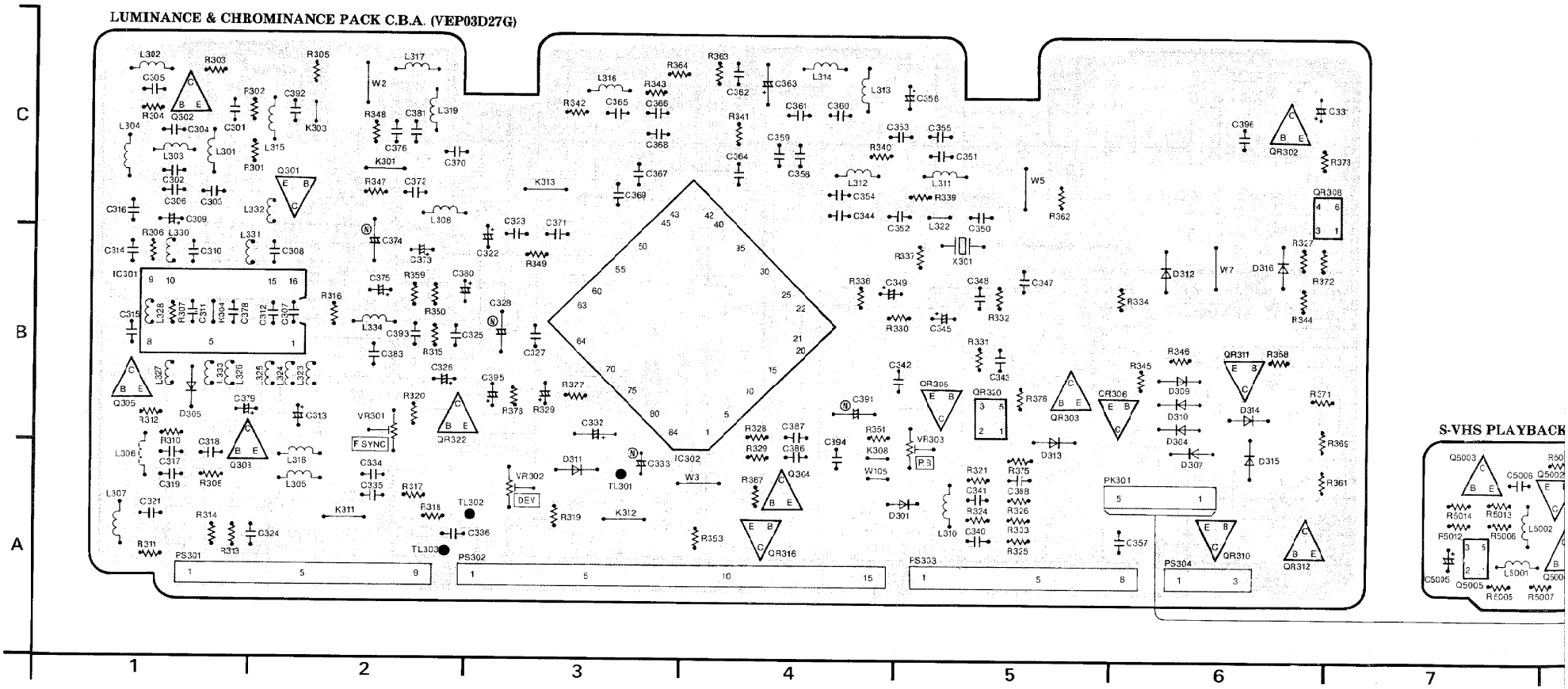




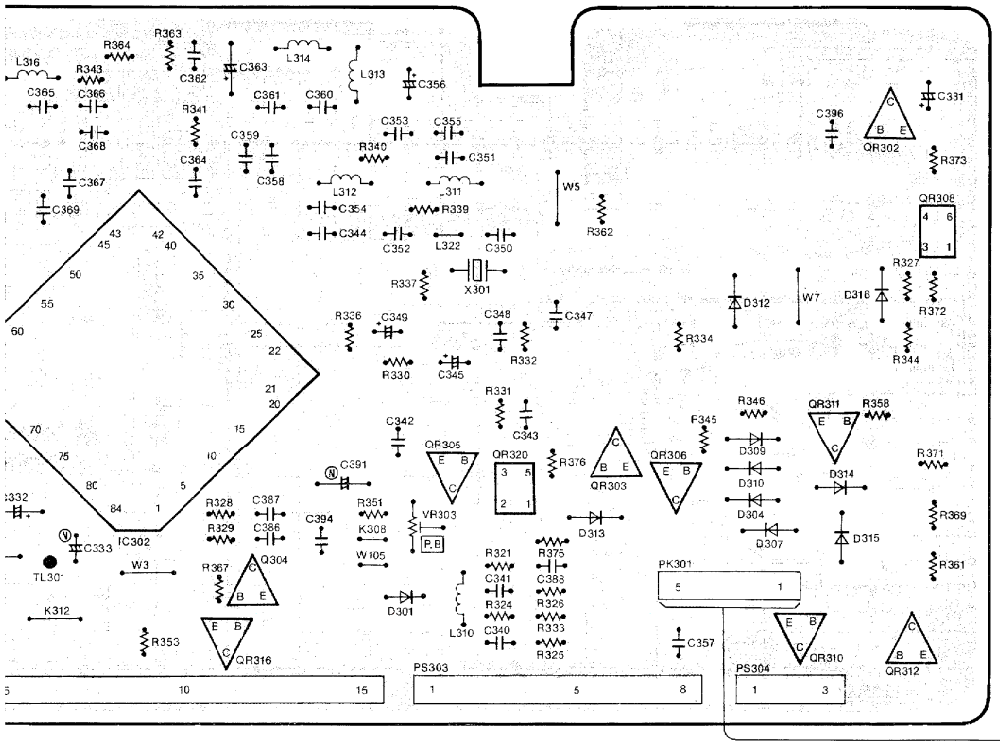
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

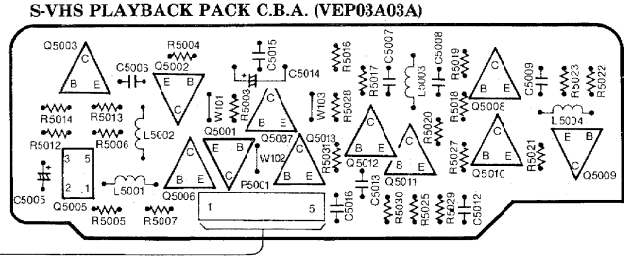
4-9. LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03D27G)



)27G)



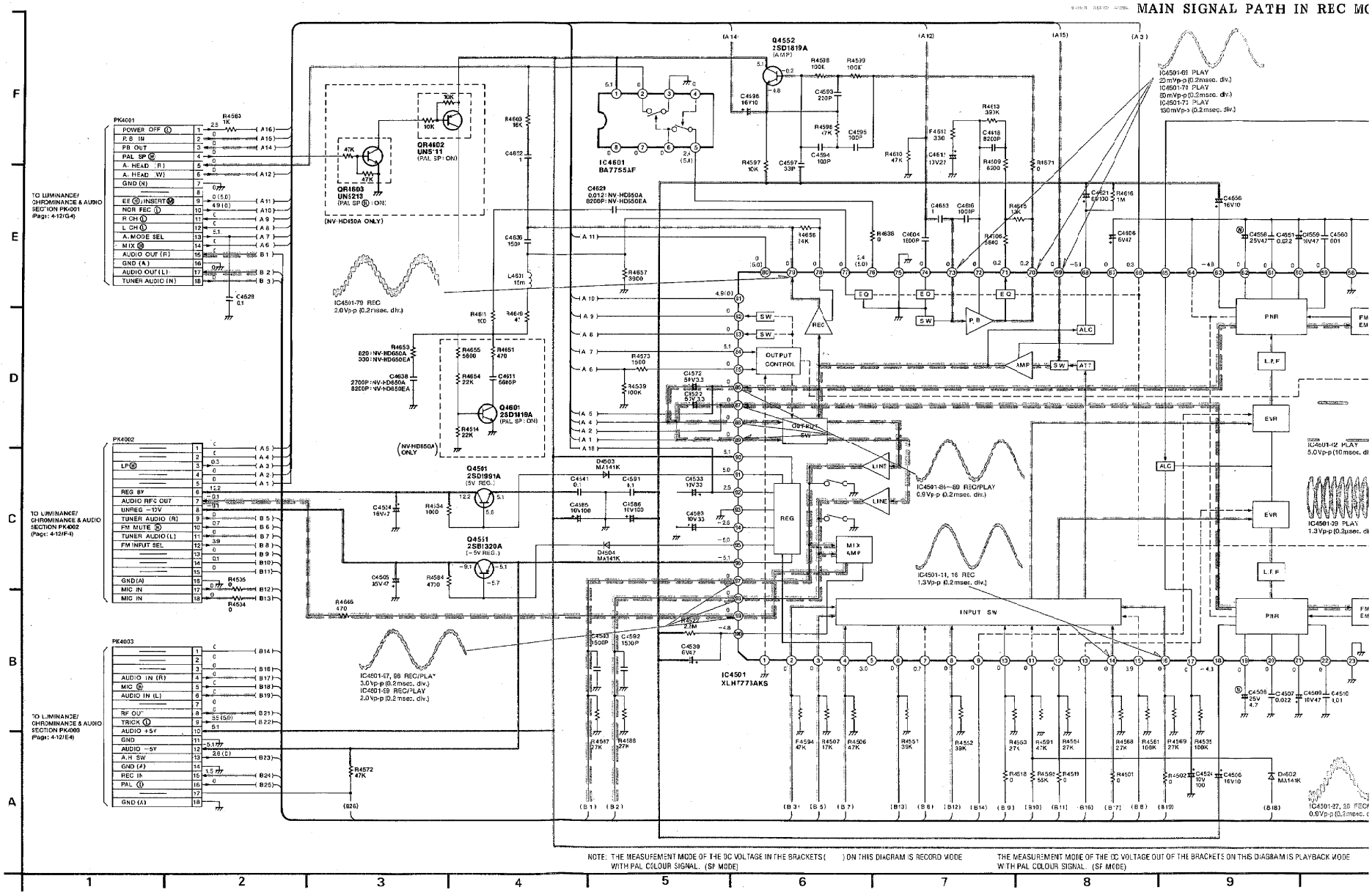
S-VHS PLAYBACK PACK C.B.A. (VEP03A03A)



LUMINANCE & CHROMINANCE PACK C.B.A.	
Transistor	
Q301	C-2
Q302	C-1
Q303	A-1
Q304	A-4
Q305	B-1
Q5001	A-8
Q5002	A-8
Q5003	A-7
Q5005	A-7
Q5006	A-8
Q5007	A-8
Q5008	A-9
Q5009	A-9
Q5010	A-9
Q5011	A-8
Q5012	A-8
Q5013	A-8
Transistor & Resistor	
QR302	C-6
QR303	B-5
QR305	B-5
QR306	B-6
QR308	C-6
QR310	A-6
QR311	B-6
QR312	A-6
QR316	A-4
QR320	B-5
QR322	B-2
Integrated Circuit	
IC301	B-1
IC302	B-4
Test Point	
TL301	A-3
TL302	A-3
TL303	A-2
Adjustment	
VR301	B-2
VR302	A-3
VR303	B-5
Connector	
P5001	A-8
PK301	A-6
PS301	A-1
PS302	A-3
PS303	A-5
PS304	A-6

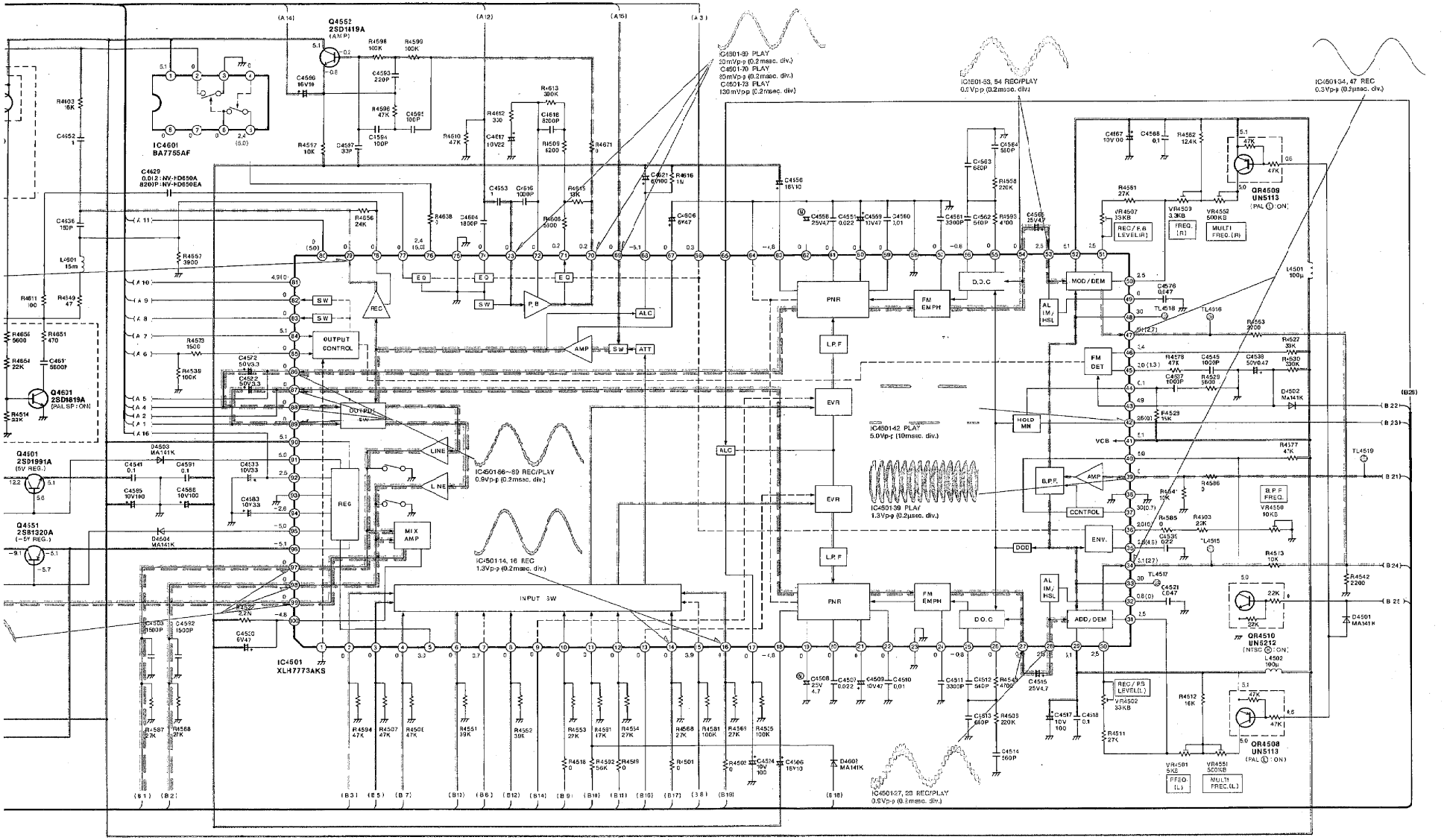
ADDRESS INFORMATION

4-10. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM



MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)

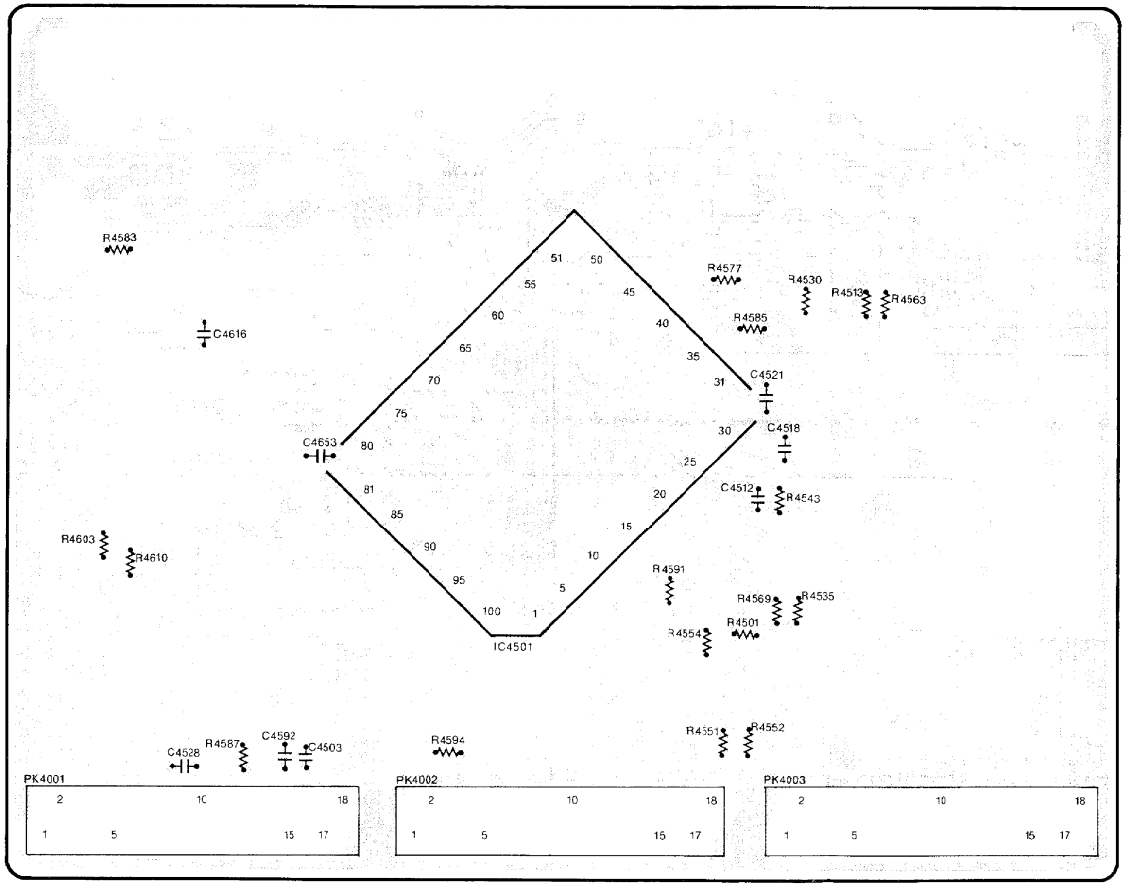
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL (SP MODE)

• LINE IN SIGNAL LEVEL... −10dB 1kHz

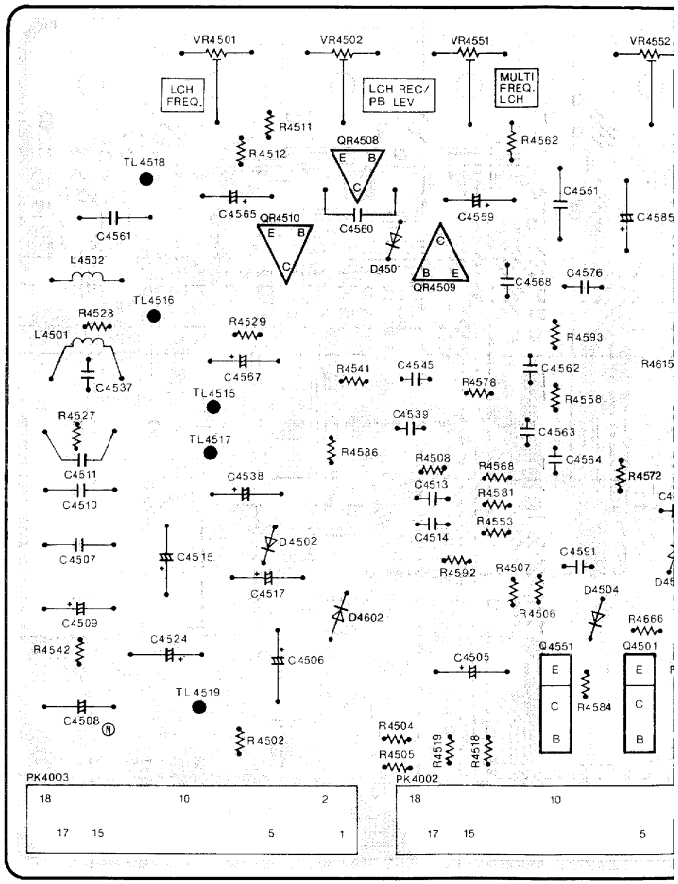
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13

4-11. Hi-Fi AUDIO PACK C.B.A. (VEP04447PQ: NV-HD650A) (VEP04447PP: NV-HD650EA)

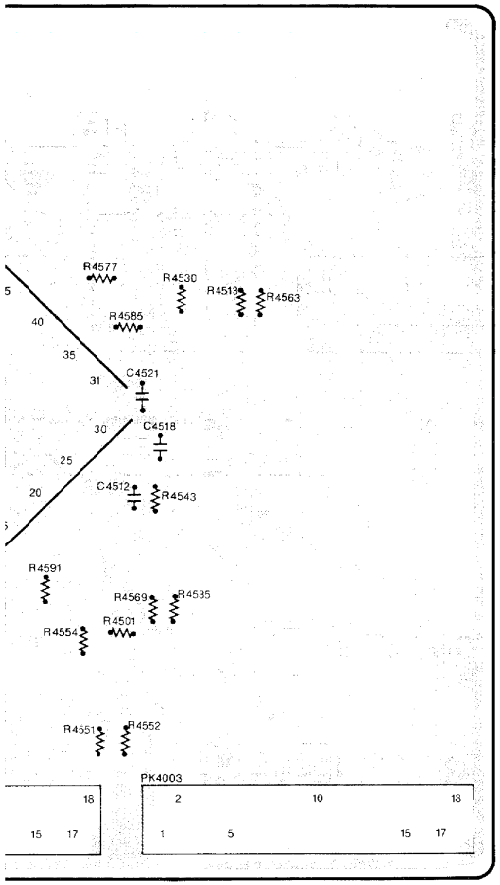


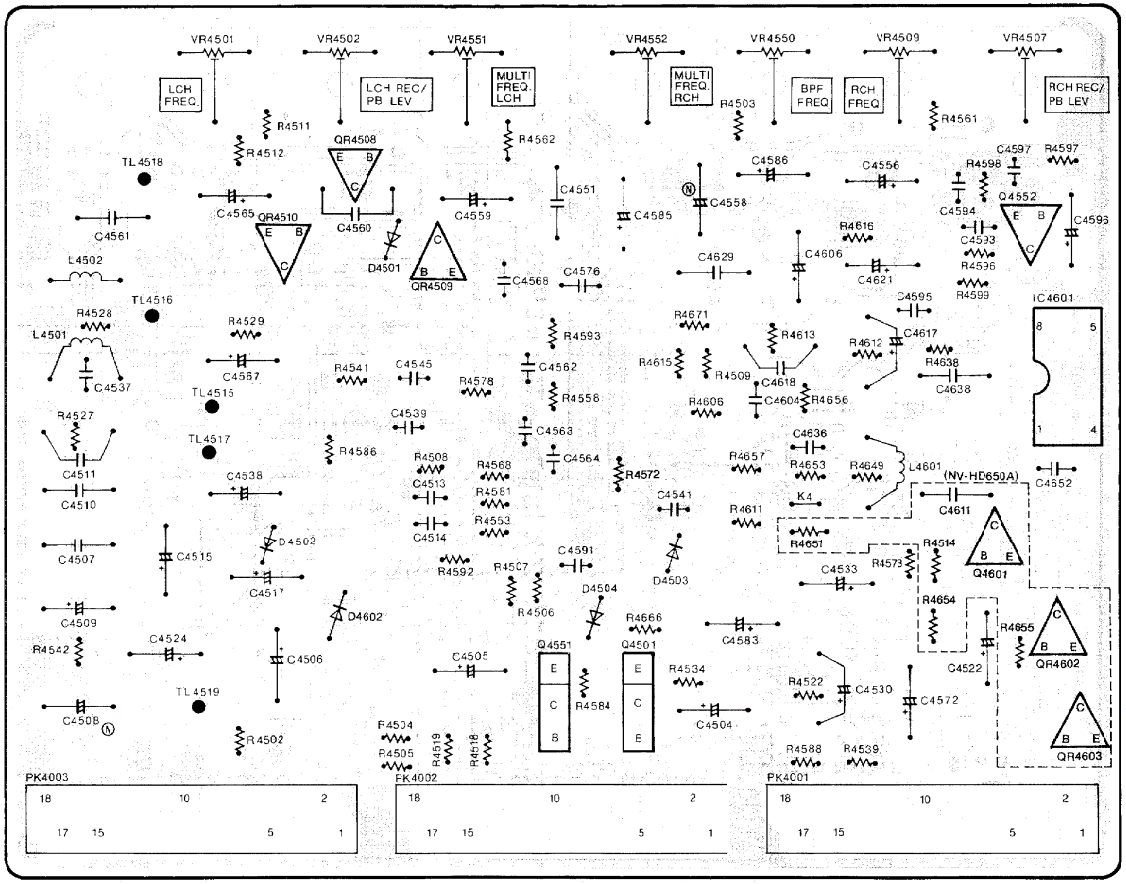
(COMPONENT SIDE)



(FOIL SIDE)

(VEP04447PP: NV-HD650EA)





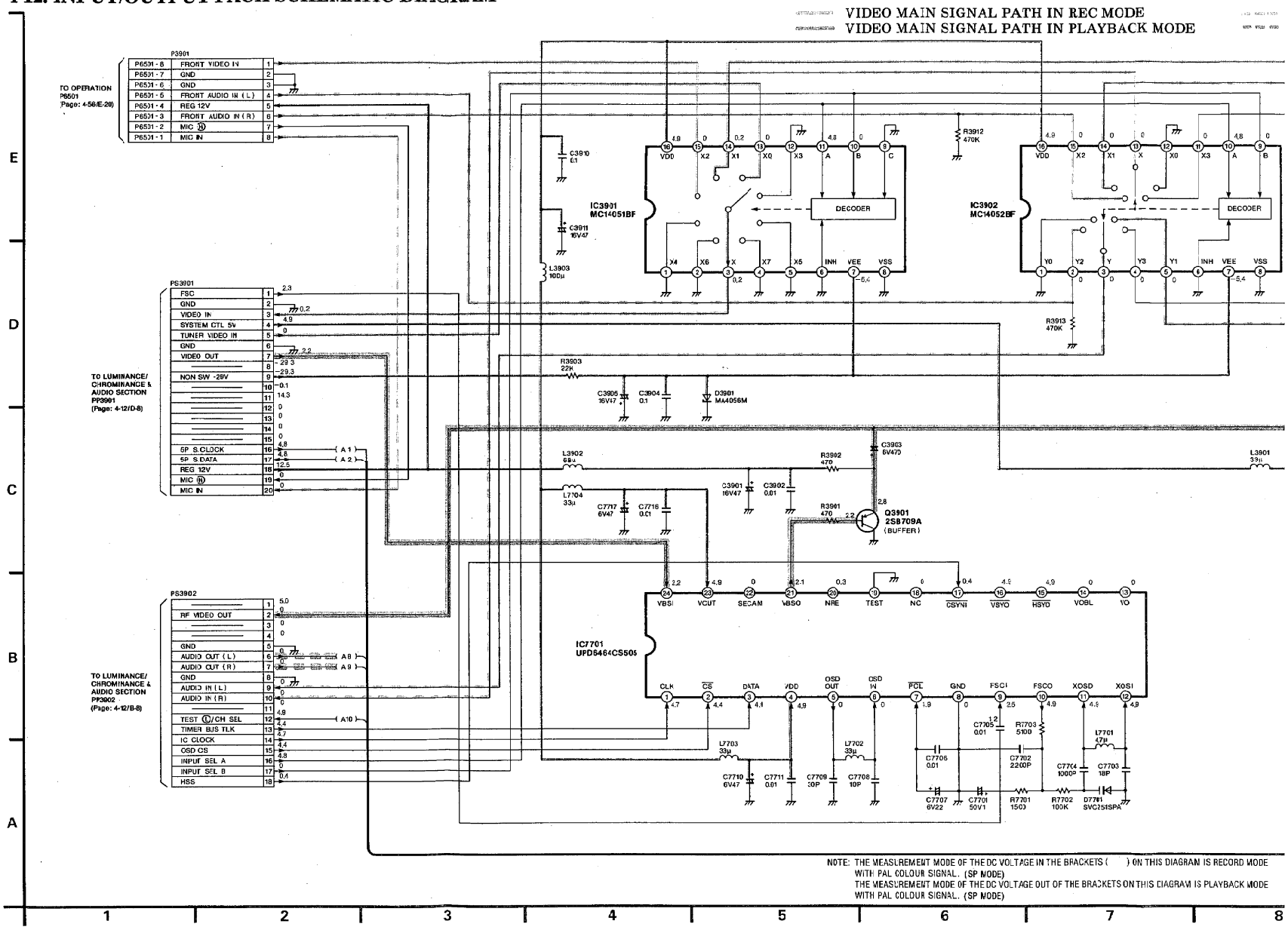
(FOIL SIDE)

Hi-Fi AUDIO PACK C.E.A.	
Transistor	
Q4501	A-7
Q4551	A-7
Q4552	C-9
Q4601	B-9
Transister & Resistor	
QR4503	C-6
QR4509	C-7
QR4510	C-6
QR4602	B-9
QR4603	A-9
Integrated Circuit	
IC4501	B-3
IC4601	C-9
Test Point	
TL4515	B-6
TL4516	C-5
TL4517	B-6
TL4518	C-5
TL4519	A-6
Adjustment	
VR4501	D-6
VR4502	D-6
VR4507	D-9
VR4509	D-8
VR4550	D-8
VR4551	D-7
VR4552	D-7
Connecter	
PK4001	A-1
PK4002	A-8
PK4002	A-2
PK4002	A-7
PK4003	A-4
PK4003	A-5

ADDRESS INFORMATION

3 | 4 | 5 | 6 | 7 | 8 | 9

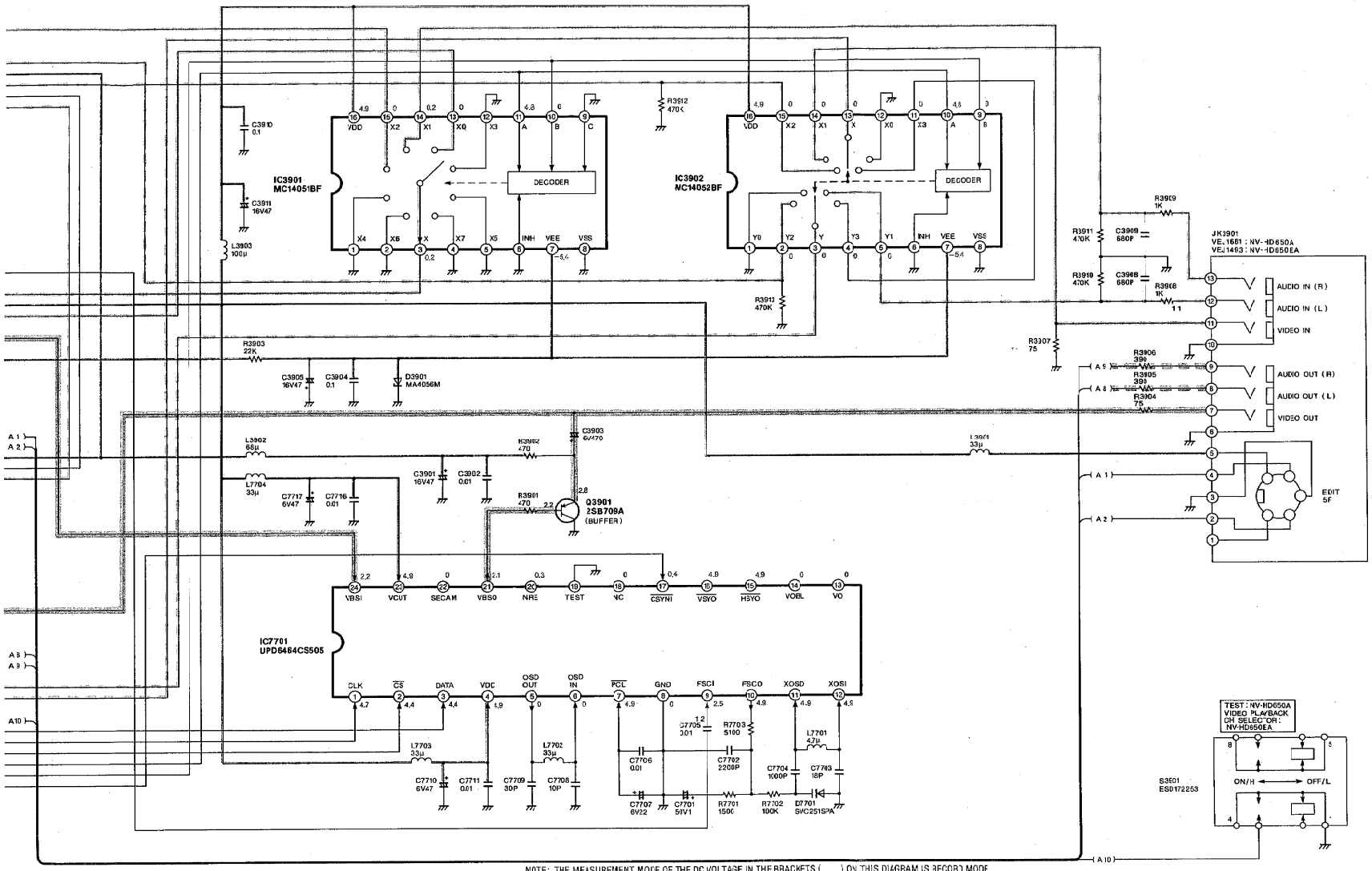
4-12. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM



IATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

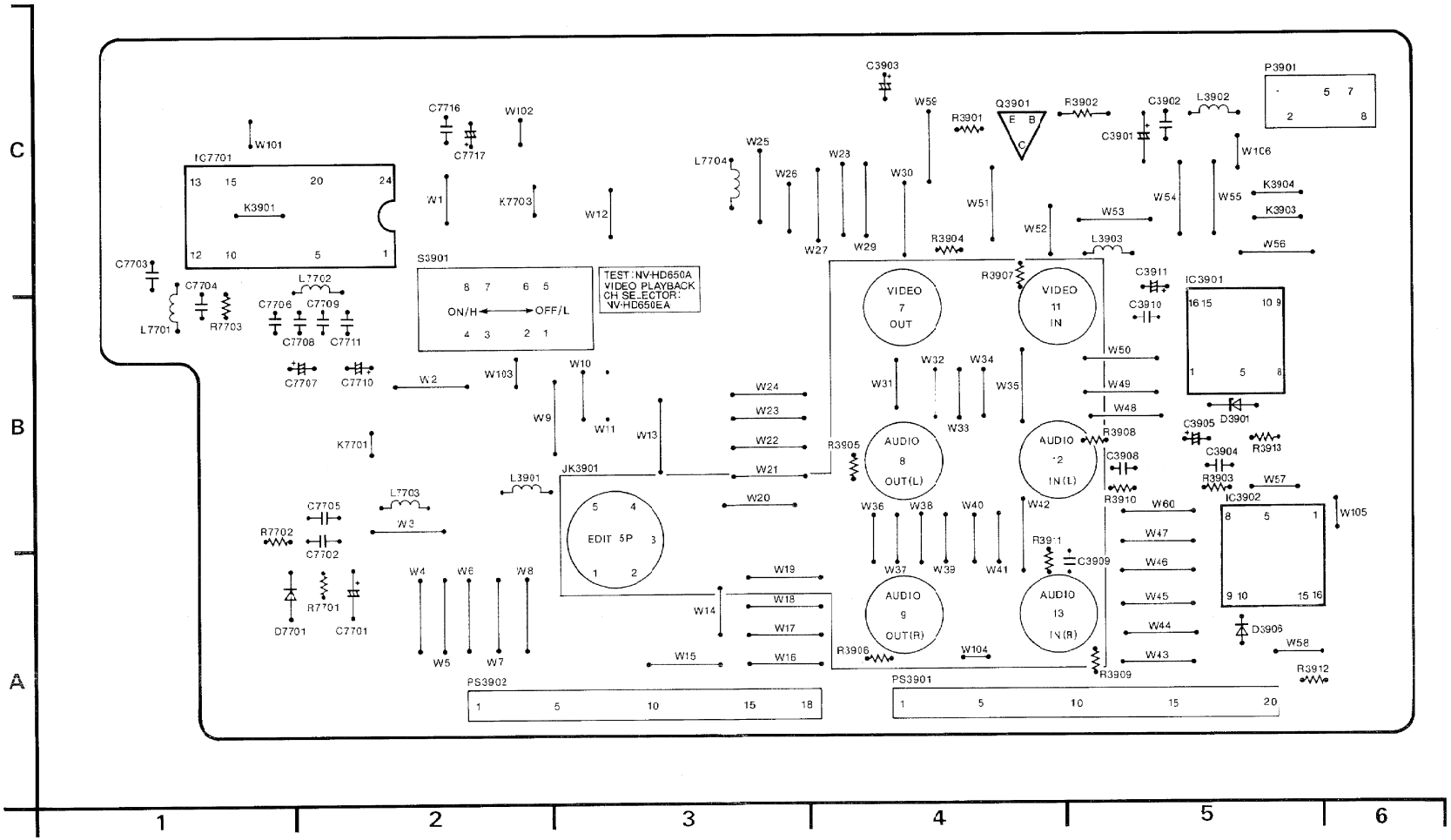
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3 4 5 6 7 8 9 10

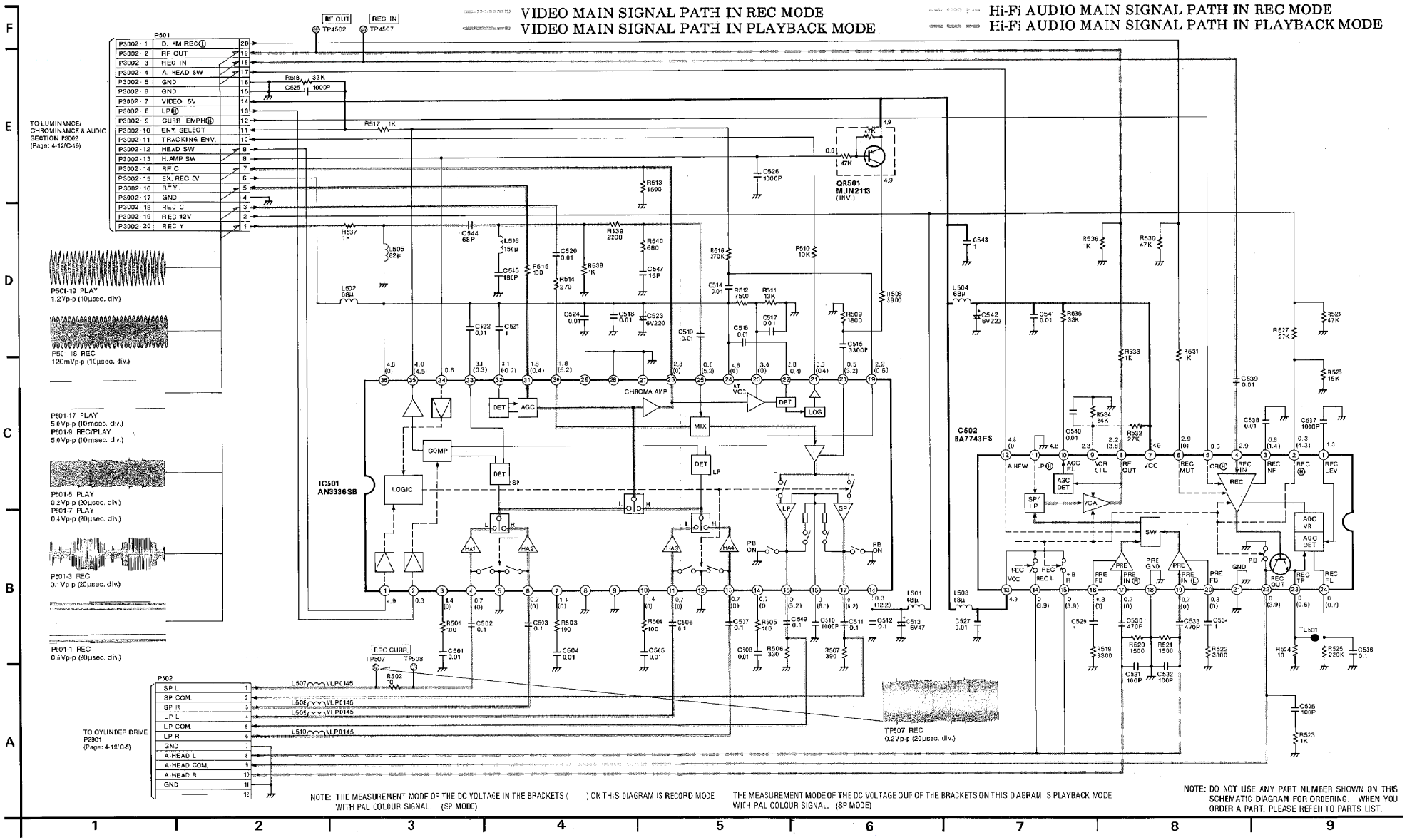
4-13. INPUT/OUTPUT PACK C.B.A. (VEP03B27F: NV-HD650A) (VEP03B27A: NV-HD650EA)

INPUT/OUTPUT PACK C.B.A.	
Transistor	
Q3901	C-4
Integrated Circuit	
IC3901	B-5
IC3902	B-5
IC7701	C-1
Connector	
P3901	C-5
PS3901	A-4
PS3902	A-2

ADDRESS INFORMATION



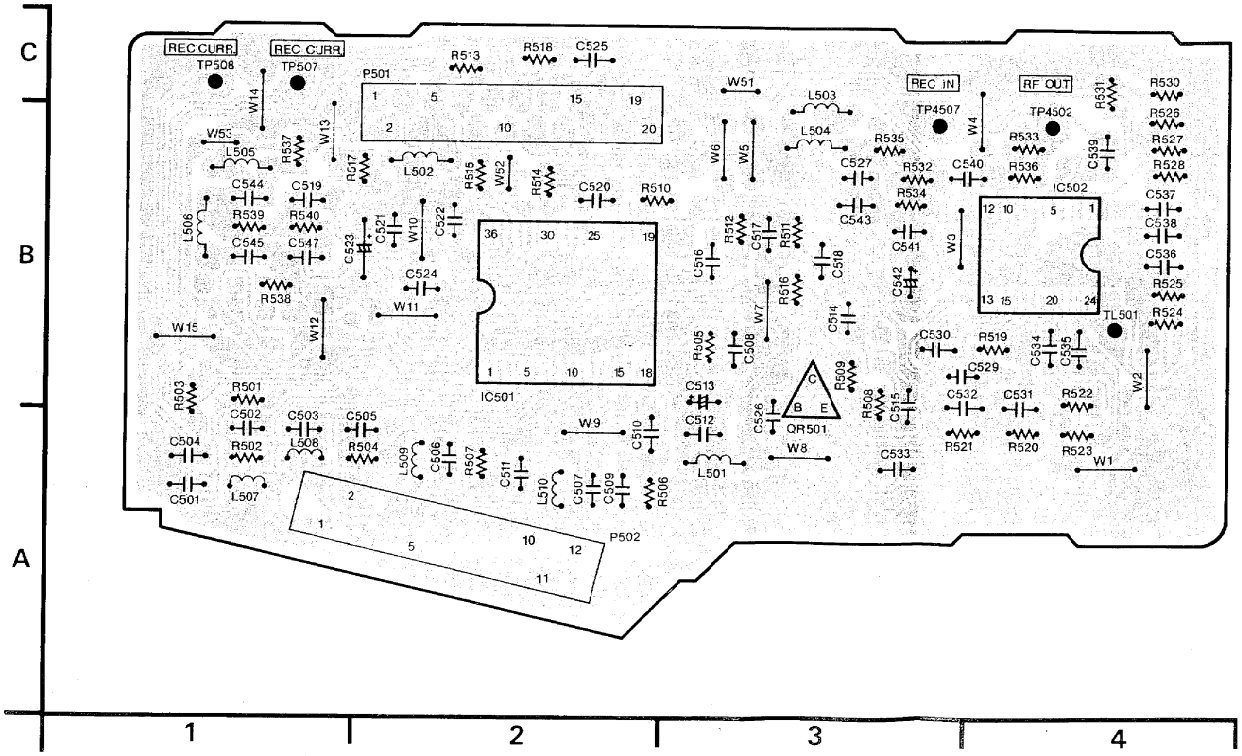
4-14. HEAD AMP SCHEMATIC DIAGRAM



4-15. HEAD AMP C.B.A. (VEP05227A)

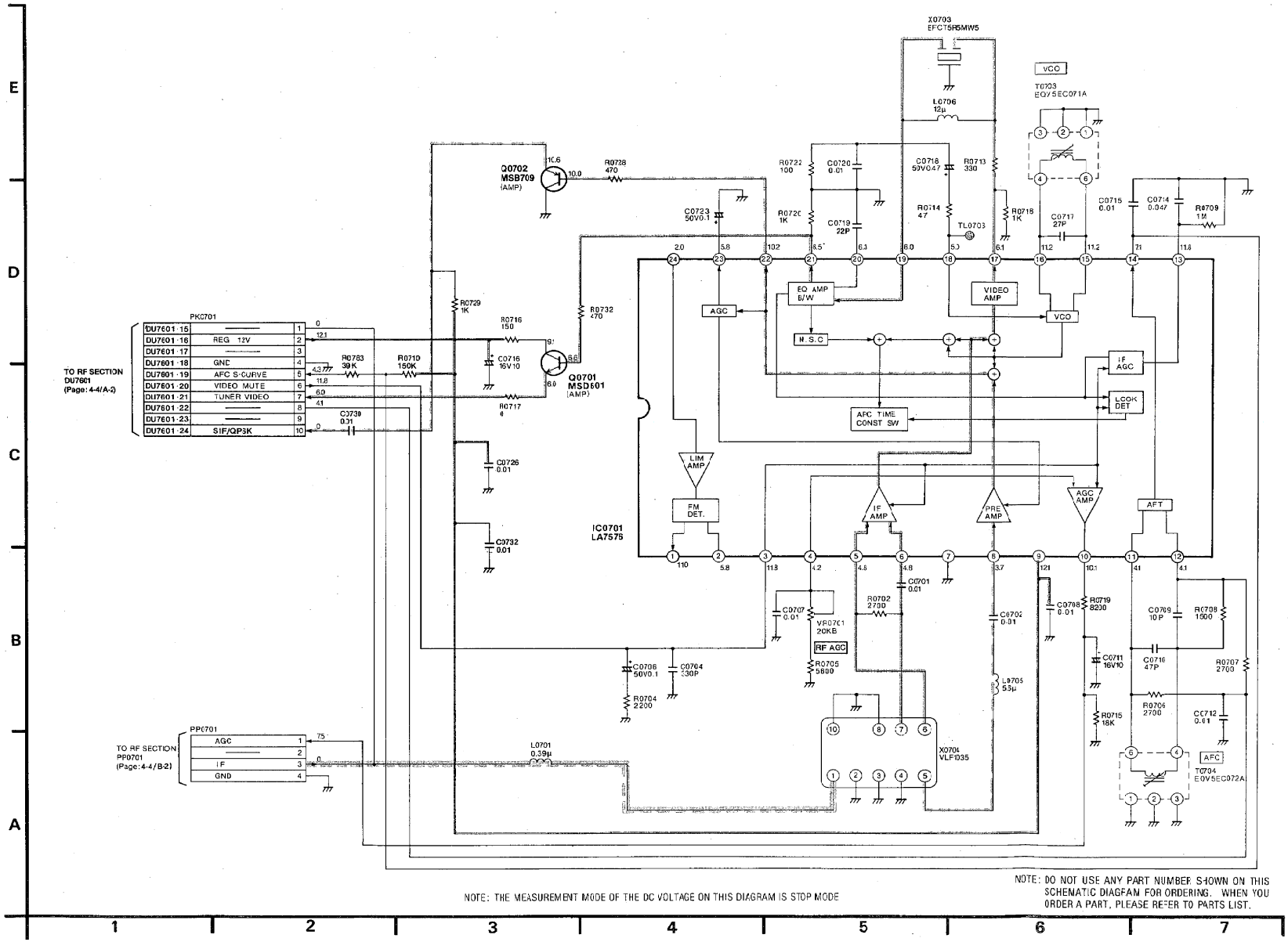
HEAD AMP C.B.A.	
Transistor & Resistor	
QR501	A-3
Integrated Circuit	
IC501	B-2
IC502	B-4
Test Point	
TL501	B-4
TP507	C-1
TP508	C-1
TP4502	B-4
TP4507	B-3
Connector	
P501	C-2
P502	A-2

ADDRESS INFORMATION



4-16. TV DEMODULATOR PACK SCHEMATIC DIAGRAM

VIDEO SIGNAL PATH AUDIO SIGNAL PATH



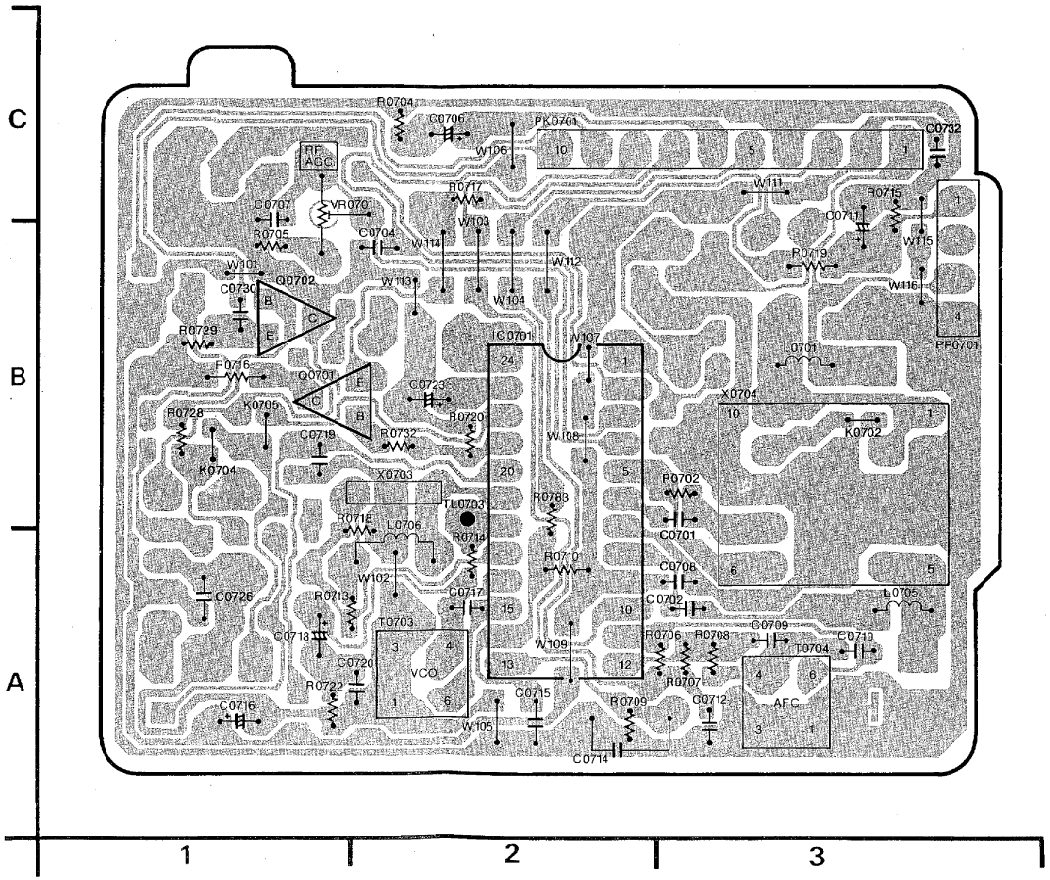
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-17. TV DEMODULATOR PACK C.B.A. (VEP07801S)

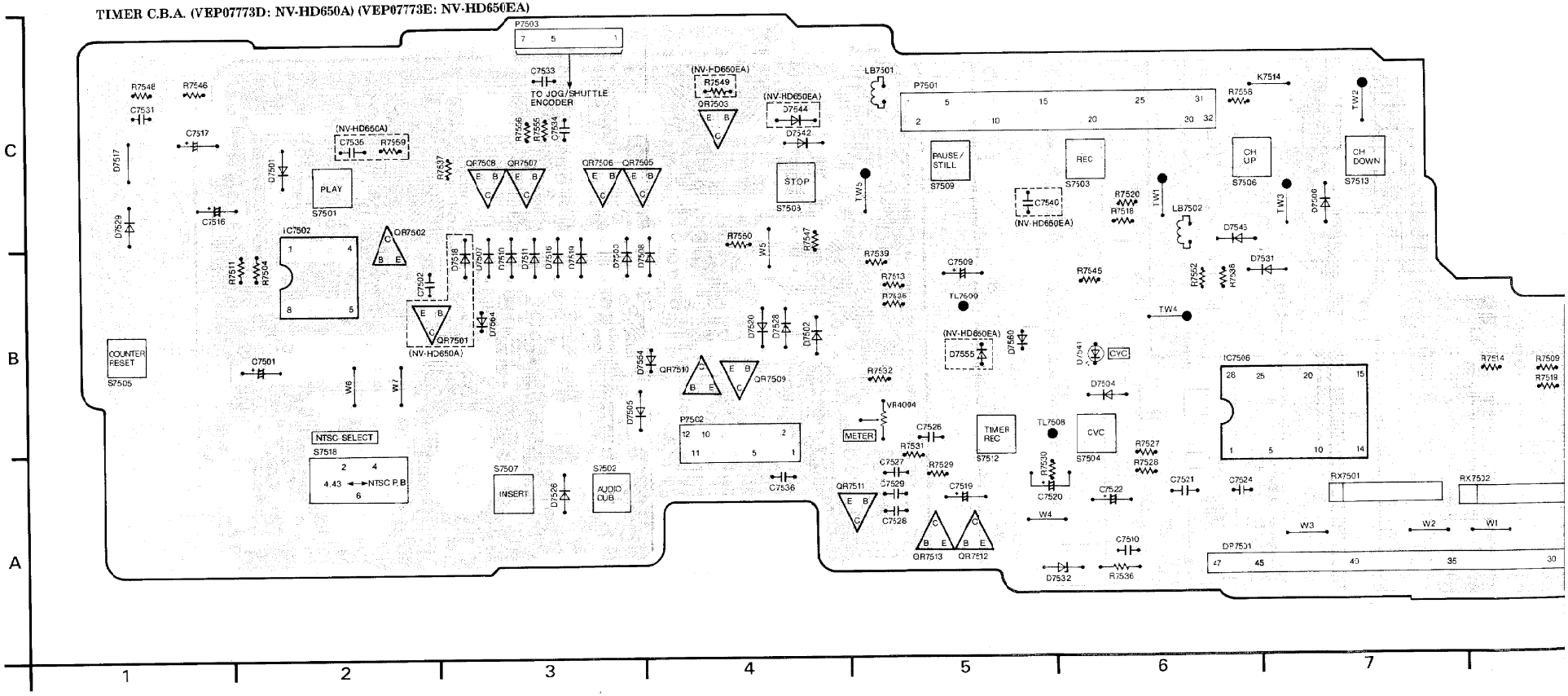
TV DEMODULATOR PACK C.B.A.	
Transistor	
Q0701	B-1
Q0702	B-1
Integrated Circuit	
IC0701	B-2
Test Point	
TL0703	B-2
Adjustment	
T0703	A-2
T0704	A-3
VR0701	C-1
Connecter	
PK0701	C-2
PP0701	B-3

ADDRESS INFORMATION

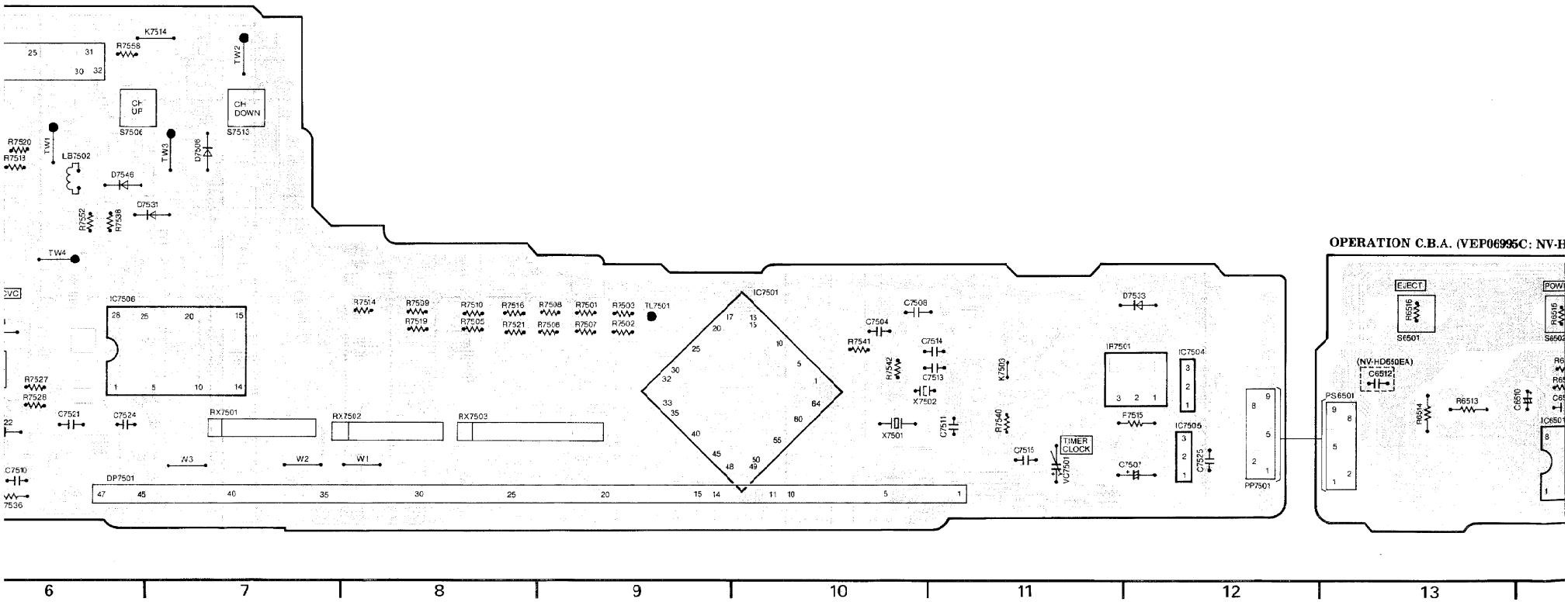


4-18. TIMER C.B.A. (VEP07773D: NV-HD650A) (VEP07773E: NV-HD650EA) & OPERATION C.B.A. (VEP06995C: NV-HD650A) (VEP06995H: NV-HD650EA)

TIMER C.B.A. (VEP07773D: NV-HD650A) (VEP07773E: NV-HD650EA)



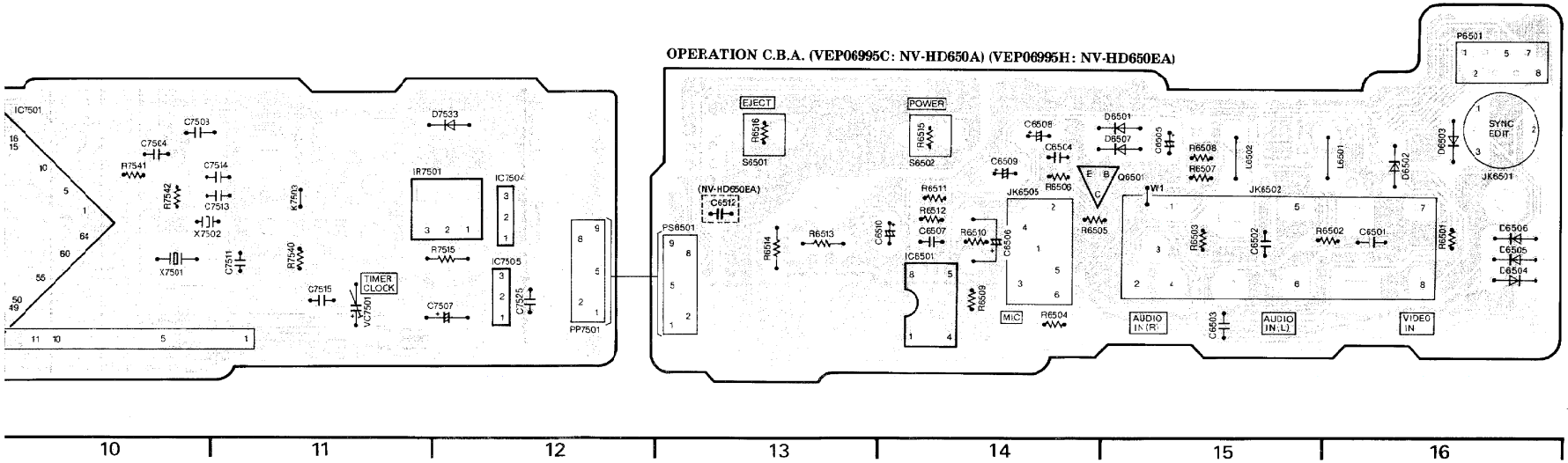
V-HD650A) (VEP06995H: NV-HD650EA)



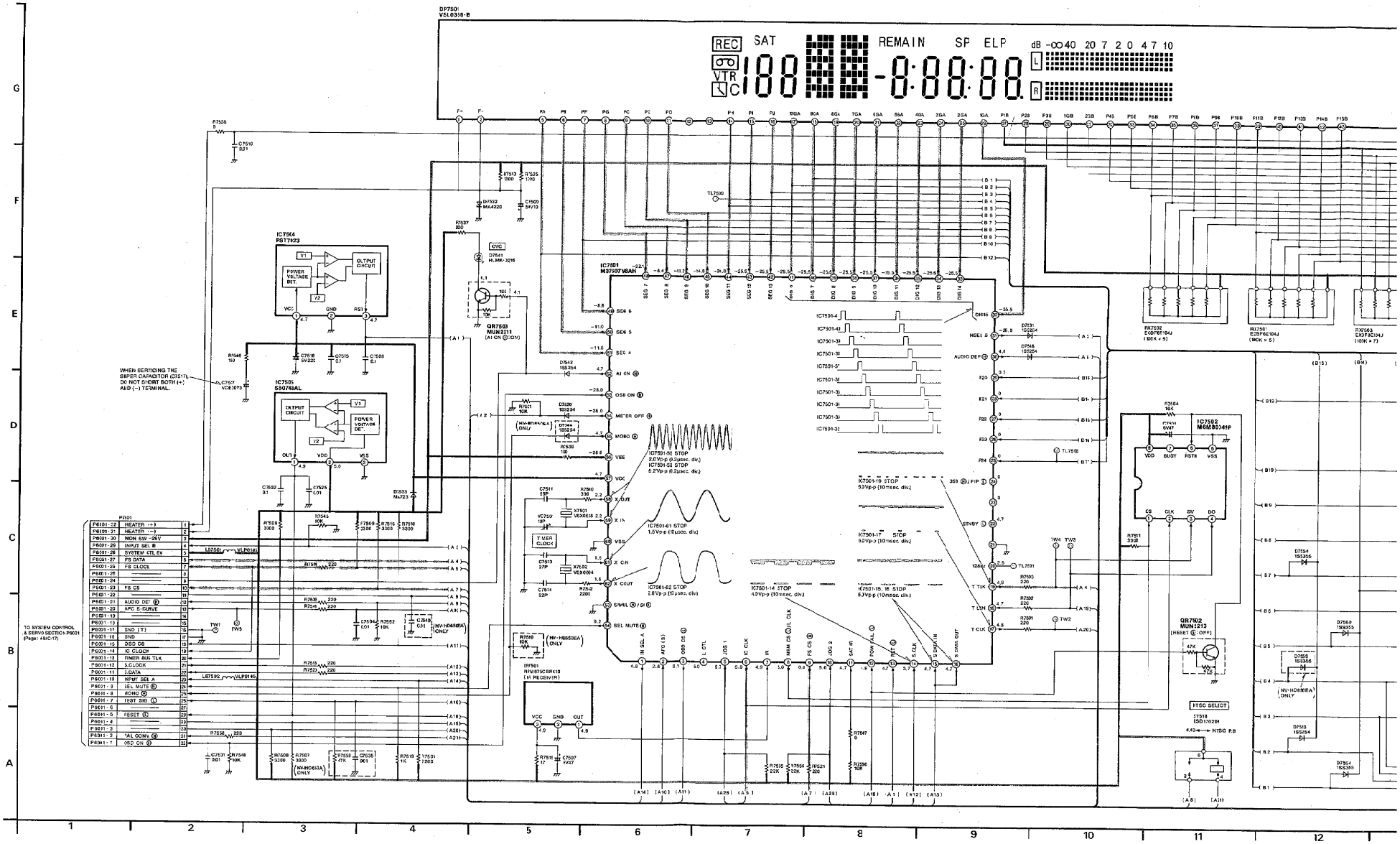
TIMER C.B.A.	
Transistor	
Q6501	B-15
Transistor & Resistor	
QR7501	B-3
QR7502	C-2
QR7503	C-4
QR7505	C-4
QR7506	C-3
QR7507	C-3
QR7508	C-3
QR7509	B-4
QR7510	B-4
QR7511	A-5
QR7512	A-5
QR7513	A-5
Integrated Circuit	
IC6501	A-14
IC7501	B-10
IC7502	C-2
IC7504	B-12
IC7505	A-12
IC7506	B-7
Test Point	
TL7501	B-9
TL7506	B-5
TL7509	B-5
TW1	C-6
TW2	C-7
TW3	C-7
TW4	B-6
TW5	C-5
Adjustment	
VC7501	A-11
VR4004	B-5
Connector	
P6501	B-16
P7501	C-5
P7502	B-4
P7503	C-3
PP7501	A-12
PS6501	B-13

ADDRESS INFORMATION

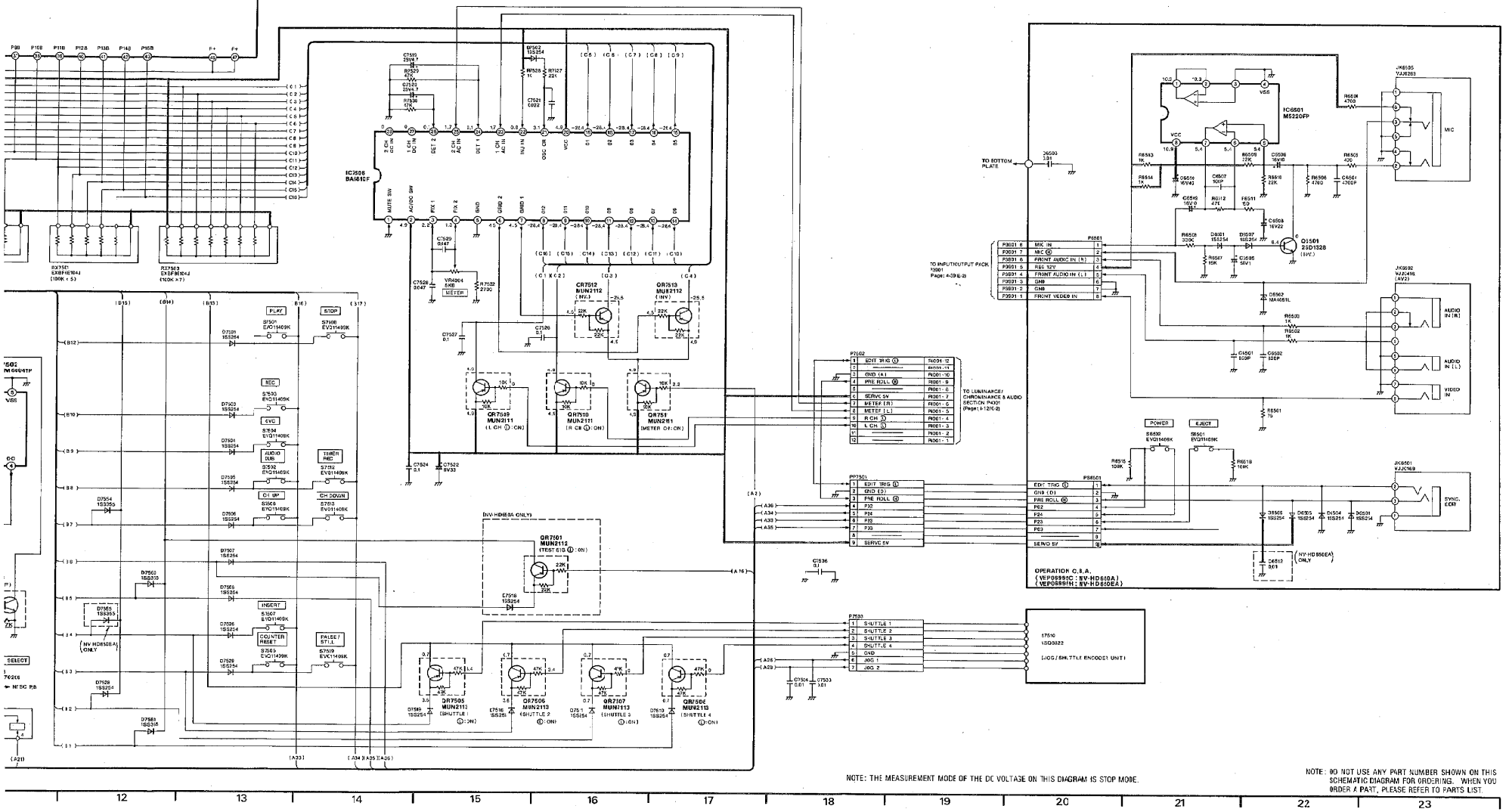
OPERATION C.B.A. (VEP06995C: NV-HD650A) (VEP06995H: NV-HD650EA)



4-19. TIMER & OPERATION SCHEMATIC DIAGRAM



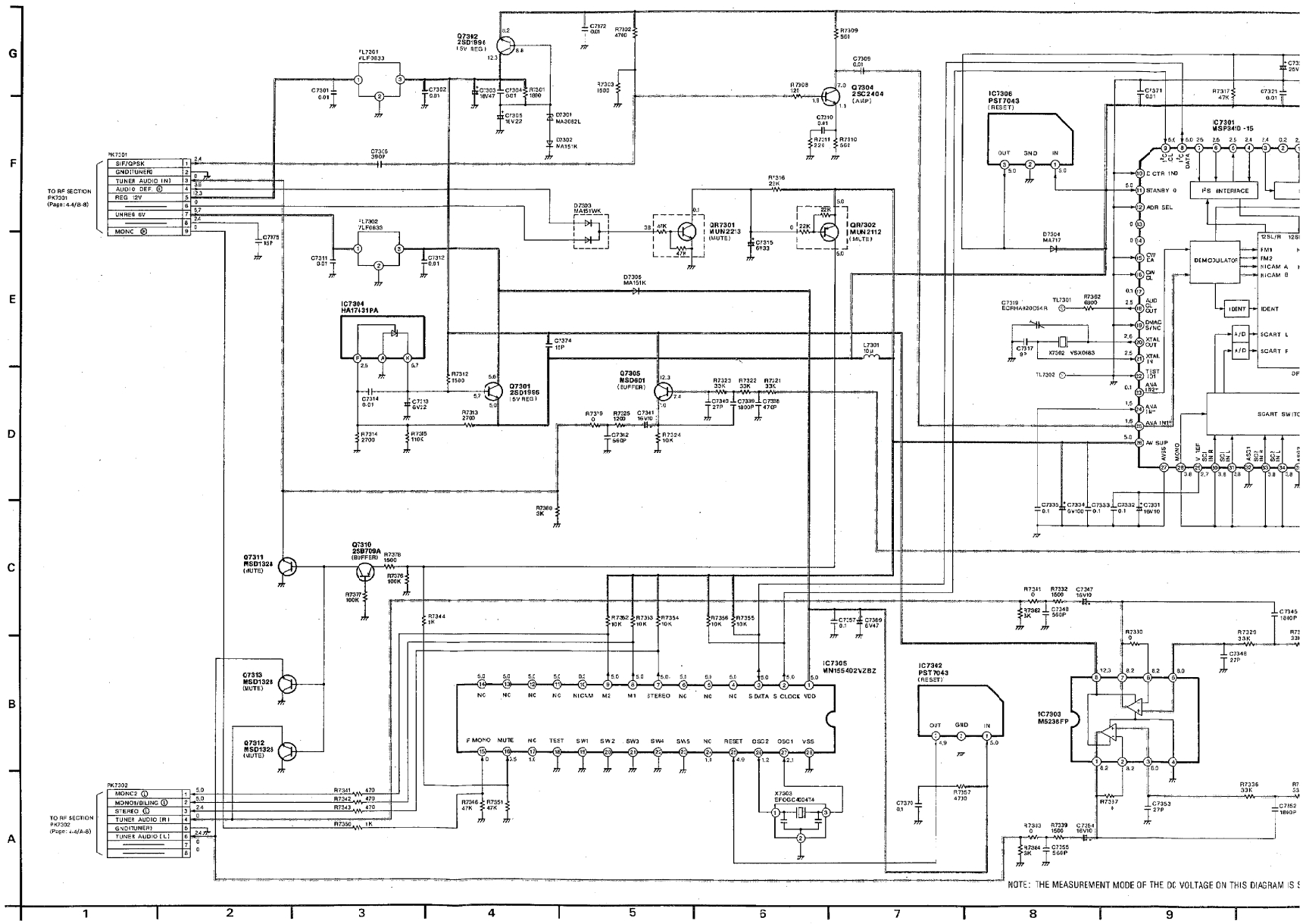
SEGMENT CONTROL SIGNAL GRID CONTROL SIGNAL TUNE CONTROL SIGNAL



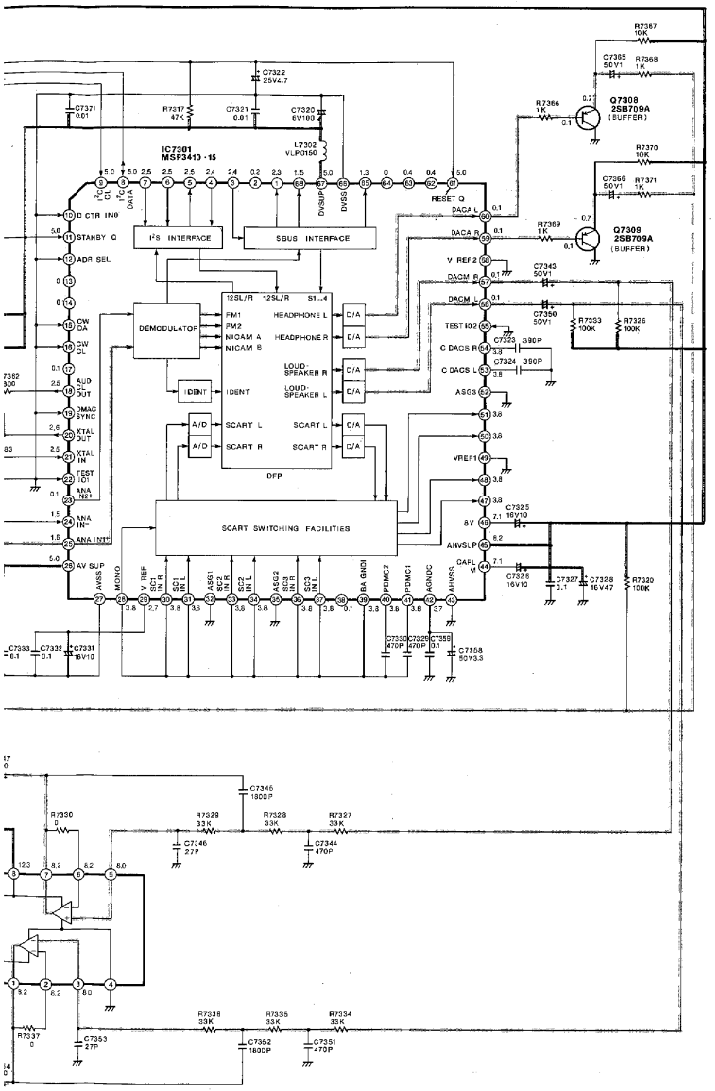
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-20. NICAM DECODER PACK SCHEMATIC DIAGRAM (NV-HD650EA)



AUDIO SIGNAL PATH



MENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

9 | 10 | 11 | 12

TV SYSTEM SELECT

IC7305		TV SYSTEM	SOUND MODULATION
SW1	SW2		
L	L	B/G	FM-MONO/NICAM GERMAN MULTIPLEX
H	L	I	FM-MONO/NICAM
*	H	M	FM-MONO

*: DO NOT CARE

FM-MONO MODE SELECT

IC7305	FM-MONO MODE	FM-MONO SOURCE
SW3		
L	INT	SIF (IF INPUT1, IF INPUT2)
H	EXT	AUDIO MULTI (MONO IN)

SIF INPUT SELECT

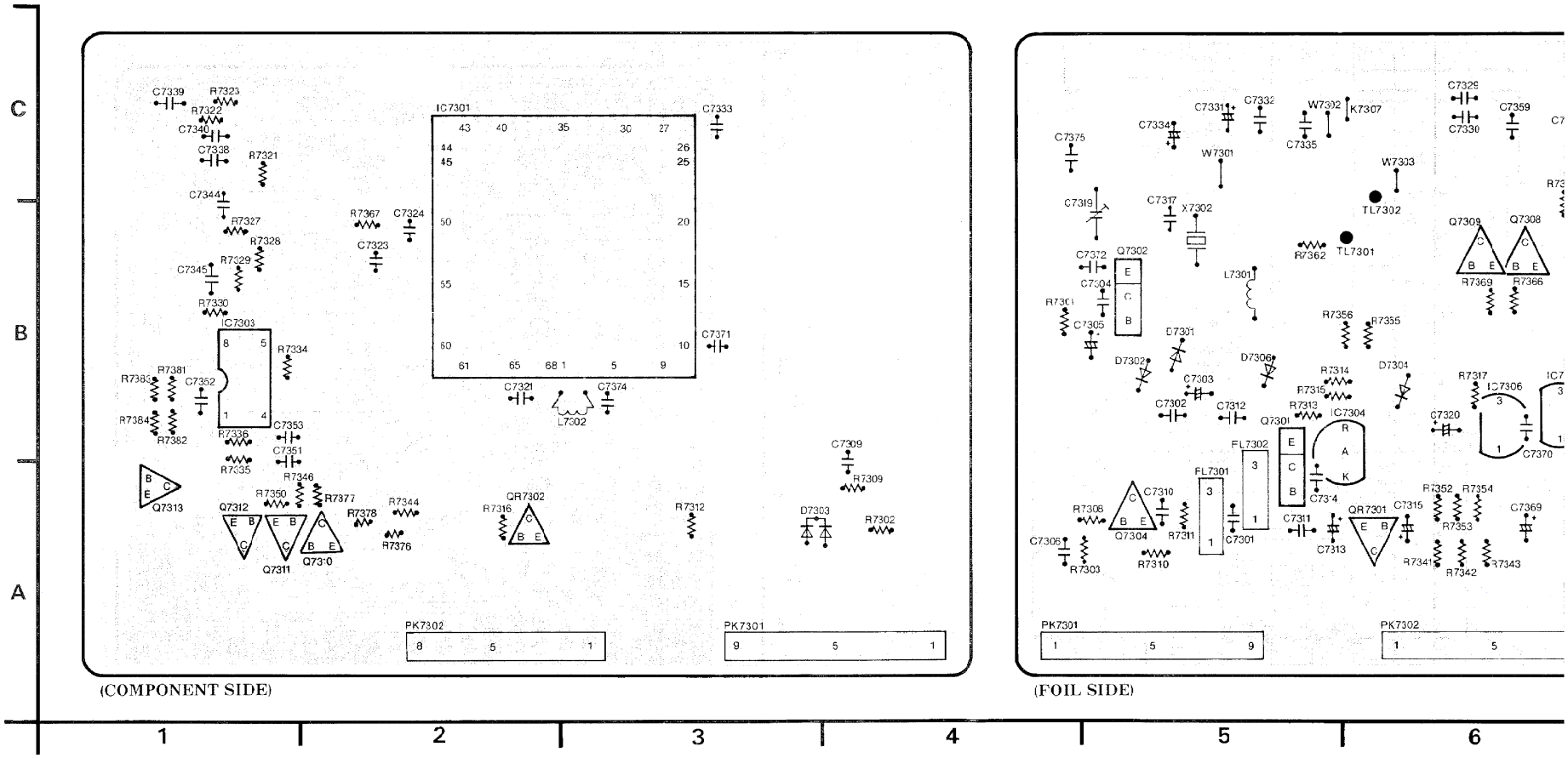
IC7305	SIF INPUT
SW4	
L	IF INPUT 1
H	IF INPUT 2

AUDIO OUTPUT SELECT

INPUT TV SYSTEM	SOUND MODULATION	FM-MONO MODE	MAIN OUTPUT		SUB OUTPUT	
			INPUT SOURCE	MATRIX	INPUT SOURCE	MATRIX
B/G	MONO	INT	IF INPUT 1/2 (FM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	MONO IN	MONAURAL	MONO IN	MONAURAL
	NICAM STEREO	INT	IF INPUT 1/2 (NICAM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	STEREO	MONO IN	MONAURAL
	NICAM M1/DATA	INT	IF INPUT 1/2 (NICAM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	MONAURAL	MONO IN	MONAURAL
	NICAM M1/M2	INT	IF INPUT 1/2 (NICAM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	STEREO	MONO IN	MONAURAL
	NICAM DATA	INT	IF INPUT 1/2 (FM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	MONO IN	MONAURAL	MONO IN	MONAURAL
	STEREO	INT	IF INPUT 1/2 (FM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
	BILINGUAL	INT	IF INPUT 1/2 (FM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
I	MONO	INT	IF INPUT 1/2 (FM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	MONO IN	MONAURAL	MONO IN	MONAURAL
	NICAM STEREO	INT	IF INPUT 1/2 (NICAM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	STEREO	MONO IN	MONAURAL
	NICAM M1/DATA	INT	IF INPUT 1/2 (NICAM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	MONAURAL	MONO IN	MONAURAL
	NICAM M1/M2	INT	IF INPUT 1/2 (NICAM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	STEREO	MONO IN	MONAURAL
	NICAM DATA	INT	IF INPUT 1/2 (FM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	MONO IN	MONAURAL	MONO IN	MONAURAL
M	MONO	INT	IFINPUT 1/2 (FM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL

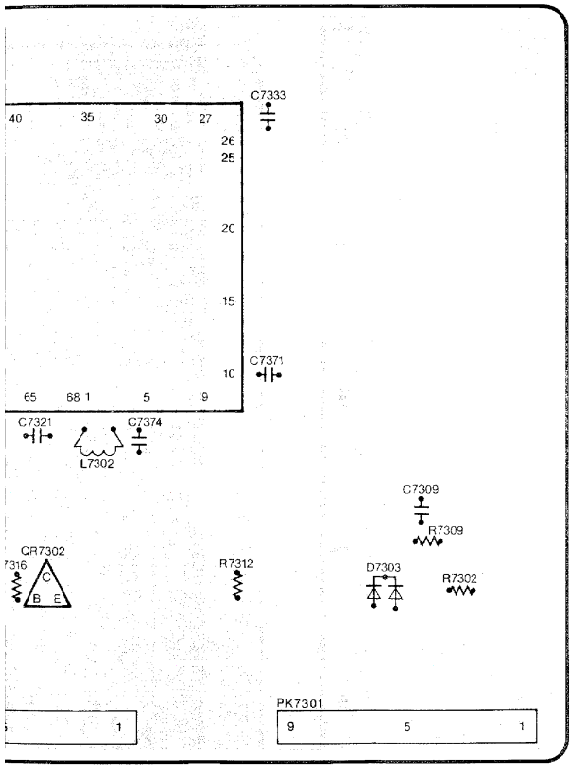
Note: When the IC7305-15 (F MONO) is high, both the MAIN OUTPUT and the SUB OUTPUT apply the FM-MONO audio.

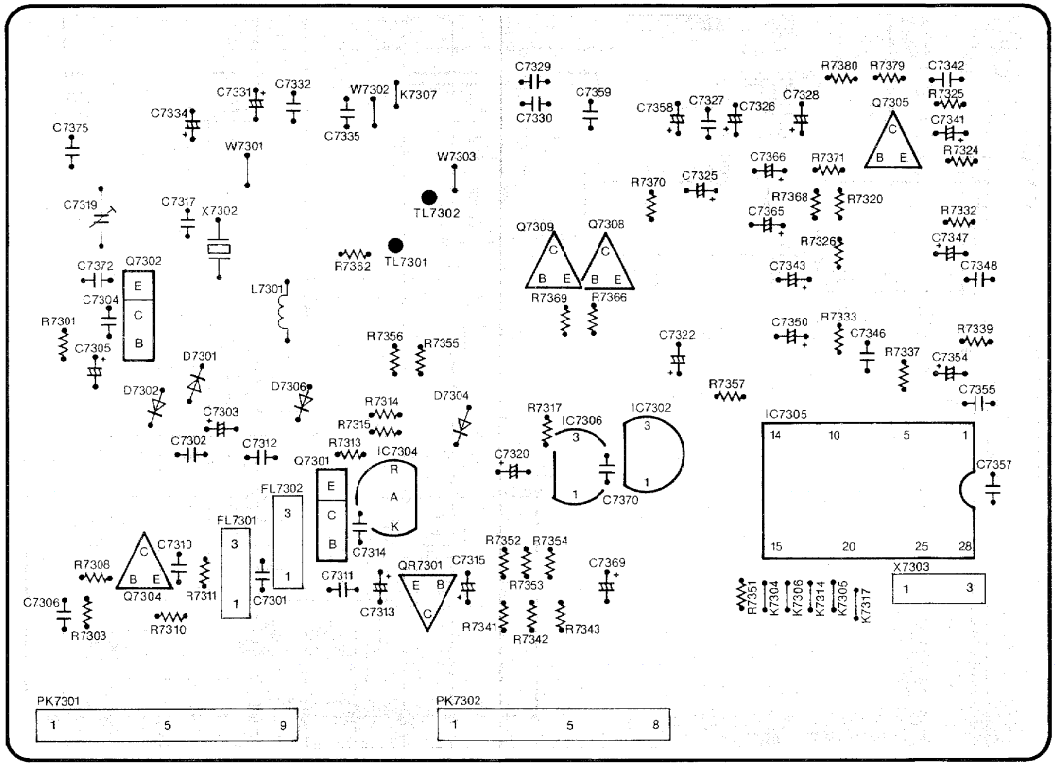
4-21. NICAM DECODER PACK C.B.A. (VEP07787E: NV-HD650EA)



(COMPONENT SIDE)

(FOIL SIDE)





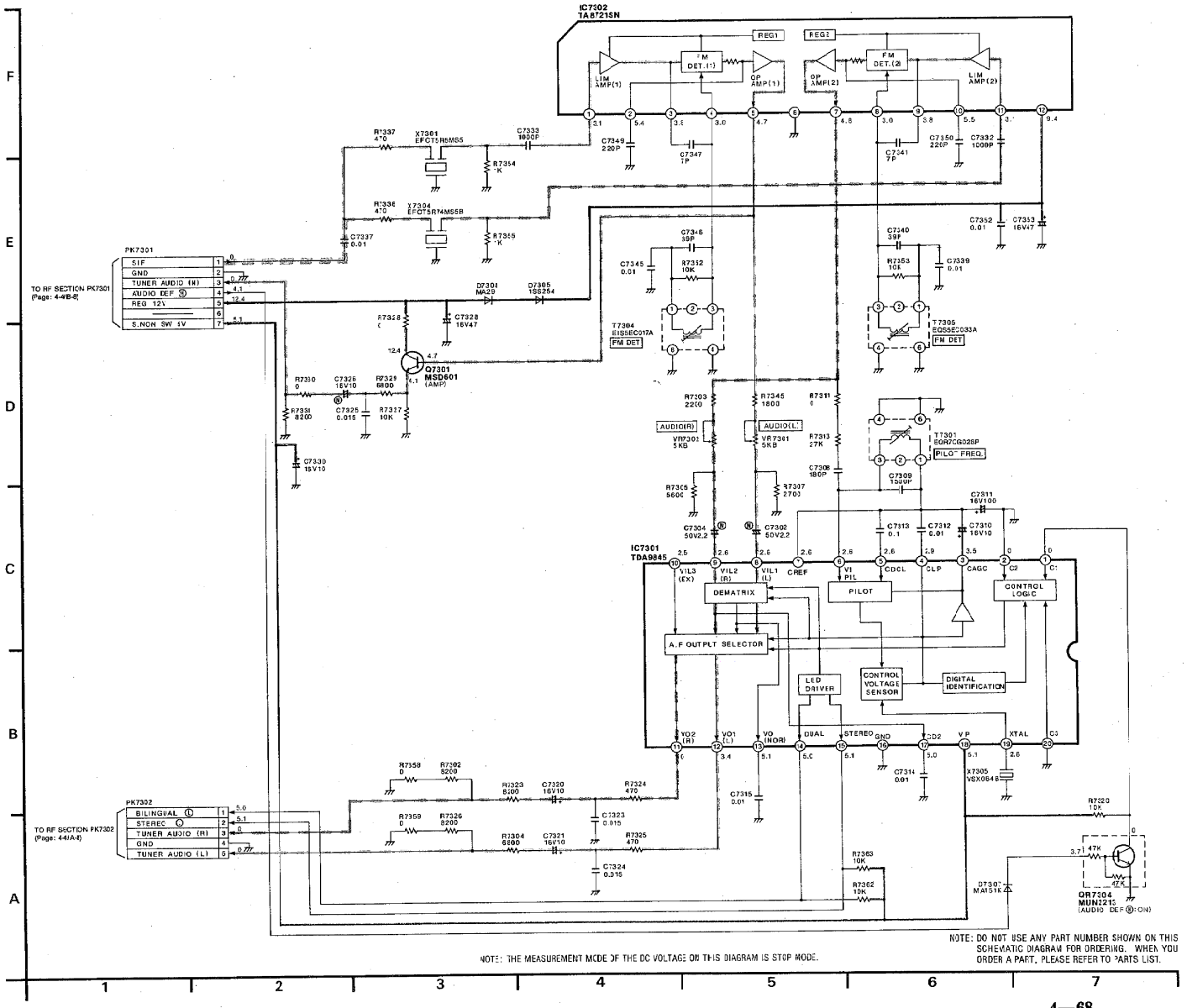
(FOIL SIDE)

NICAM DECODER PACK C.B.A.	
Transistor	
Q7301	E-5
Q7302	E-5
Q7304	A-5
Q7305	C-7
Q7308	E-6
Q7309	E-6
Q7310	A-2
Q7311	A-1
Q7312	A-1
Q7313	A-1
Transistor & Resistor	
QR7301	A-6
QR7302	A-2
Integrated Circuit	
IC7301	C-2
IC7302	E-6
IC7303	E-1
IC7304	E-6
IC7305	E-7
IC7306	E-6
Test Point	
TL7301	E-6
TL7302	C-6
Adjustment	
C7319	E-5
Connector	
PK7301	A-3
PK7301	A-5
PK7302	A-2
PK7302	A-6

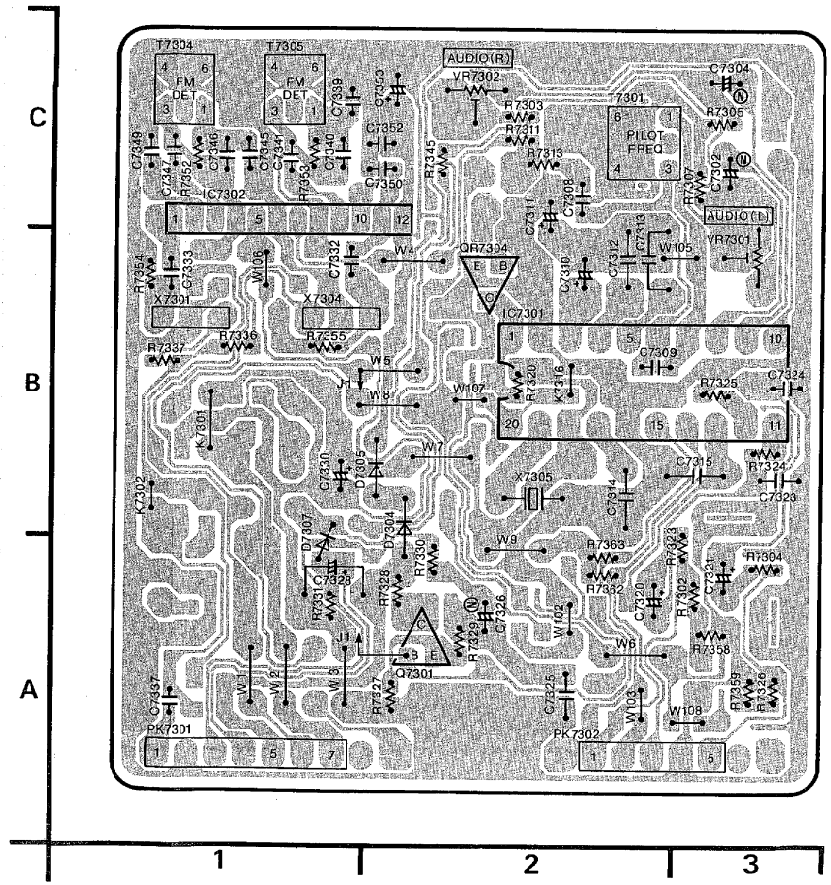
ADDRESS INFORMATION

4-22. DECODER PACK SCHEMATIC DIAGRAM (NV-HD650A)

AUDIO MAIN SIGNAL PATH AUDIO SUB SIGNAL PATH



4-23. DECODER PACK C.B.A. (VEP07784A: NV-HD650A)



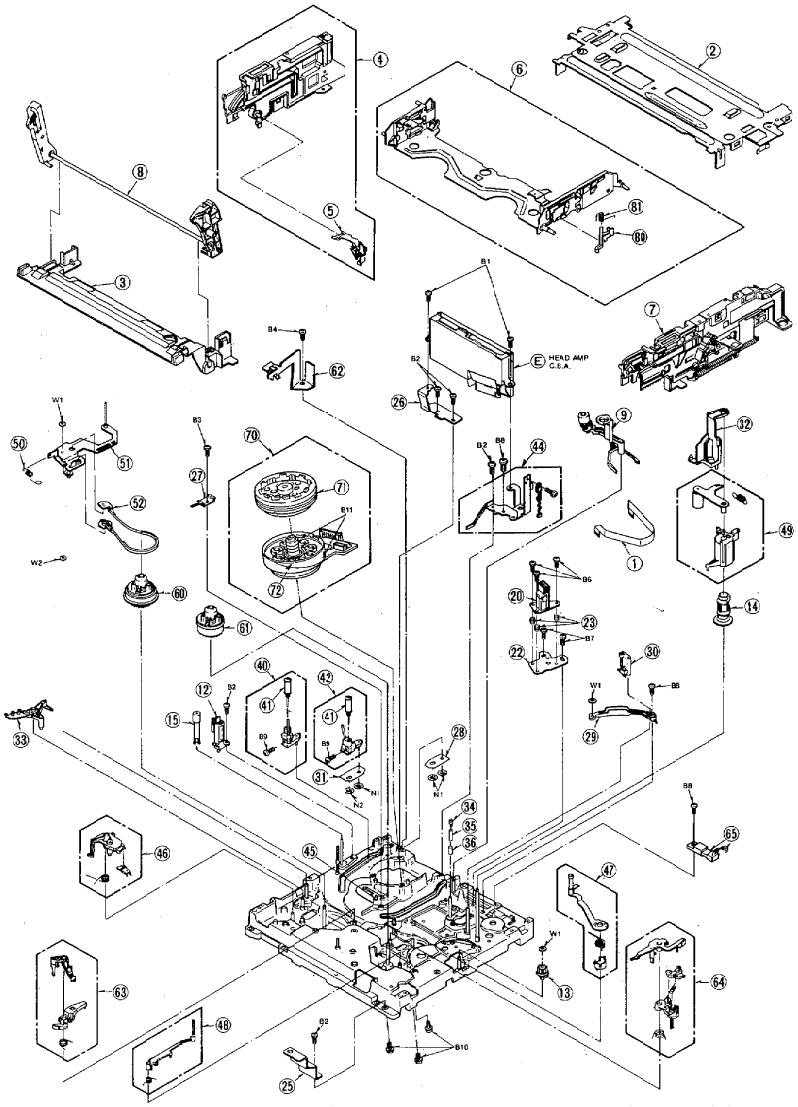
DECODER PACK C.B.A.	
Transistor	
Q7301	A-2
Transistor & Resistor	
QR7304	B-2
Integrated Circuit	
IC7301 IC7302	B-2 C-1
Adjustment	
T7301 T7304 T7305 VR7301 VR7302	C-2 C-1 C-1 B-3 C-2
Connector	
PK7301 PK7302	A-1 A-2

ADDRESS INFORMATION

SECTION 5
EXPLODED VIEWS & PARTS LIST

5-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST

❶ CHASSIS PARTS SECTION (1)



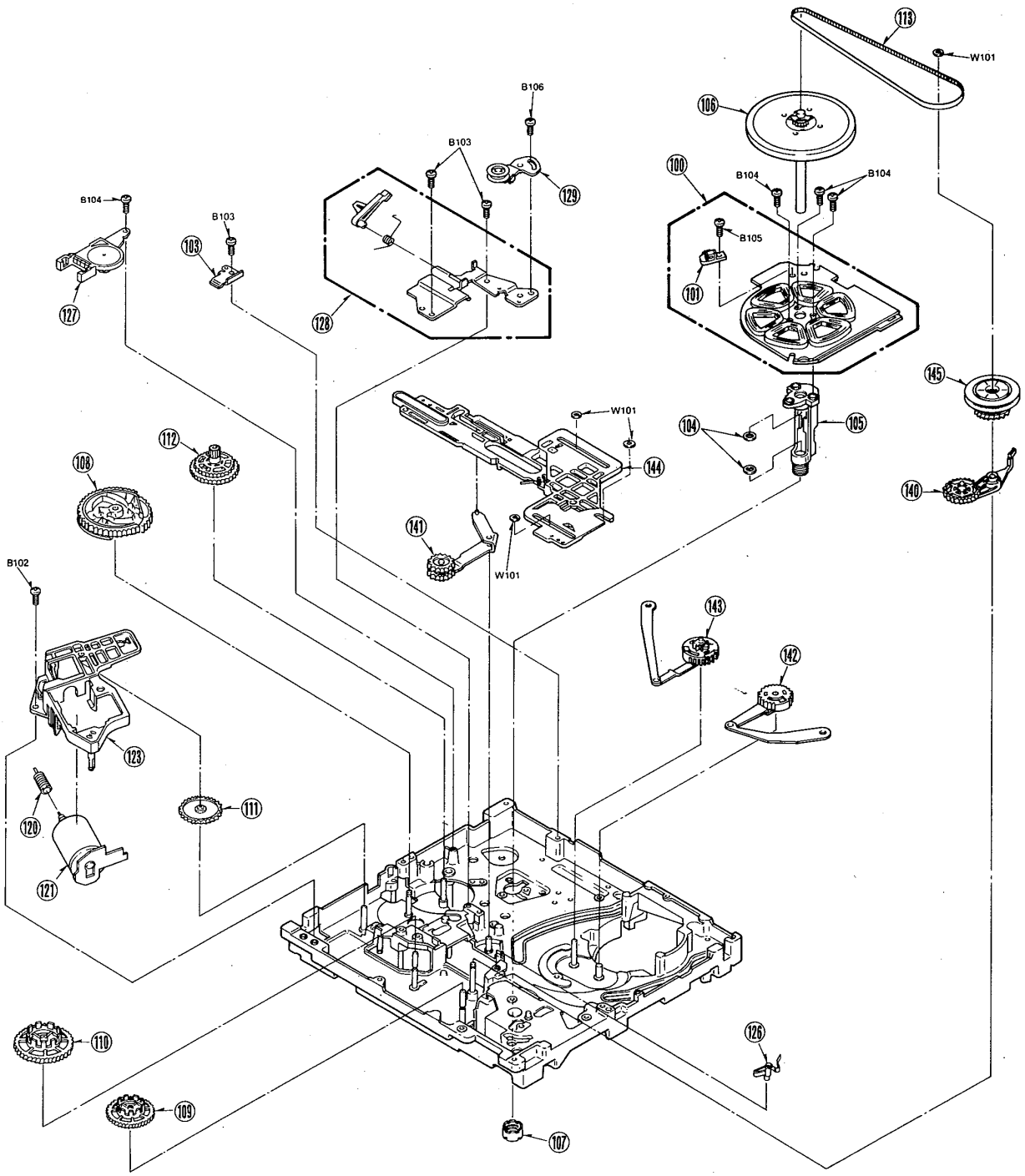
Note: 1. * Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VWJ0743	FLEXIBLE CABLE (6P)	1	P4002-P1501
2(1)		VMA8644	TOP PLATE	1	
3(1)		VMA8787	CASSETTE GUIDE	1	
4(1)		VXA4660	SIDE PLATE (L) UNIT	1	
5(1)		VML2902	OPENER LEVER	1	
6(1)		VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7(1)		VXA4606	SIDE PLATE (R) UNIT	1	
8(1)		VXP1339	MAIN SEAFT UNIT	1	
9(1)		VXL2440	CLEANER ARM UNIT	1	
12(1)		VBS0C52	FE HEAD	1	
13(1)		VDG0871	CARRIAGE CONNECTION GEAR	1	
14(1)		VDG0885	PINCH CAM GEAR	1	
15(1)		VXP1402	IMPEDANCE ROLLER UNIT	1	
20(1)		VED0217	A/C HEAD (1) UNIT	1	
22(1)		VMA8624	A/C HEAD BASE	1	
23(1)		VMB2515	A/C HEAD SPRING	3	
25(1)		VMA8761	MOUNT ANGLE	1	
26(1)		VMA9158	HEAD AMP MOUNT ANGLE (L)	1	
27(1)		VMC0917	EARTH SPRING	1	
28(1)		VMA8674	INCLINE BASE HOLDER (S)	1	
29(1)		VMD2078	F5 STOPPER BASE	1	
30(1)		VXA4927	F5 POST STOPPER UNIT	1	
31(1)		VMA8673	INCLINE BASE HOLDER (T)	1	
32(1)		VMD2101	OPENER PIECE	1	
33(1)		VML2776	TENSION SPRING ARM	1	
34(1)		VMX1544	F4 UPPER LIMITER	1	
35(1)		VMX2175	F4 SLEEVE	1	
36(1)		VMX2176	F4 LOWER LIMITER	1	
40(1)		VXA5245KIT	INCLINED BASE (S) UNIT	1	OR VXA4982KIT
41(1)		VKP1415	ROLLER POST	2	
42(1)		VXA5247KIT	INCLINED BASE (T) UNIT	1	OR VXA4984KIT
44(1)		VXA5170	HEAD AMP MOUNT ANGLE (R) U.	1	
45(1)		VMS5383	CASSETTE POSITION FIXTURE	1	
46(1)		VXL2310	REVIEW ARM UNIT	1	
47(1)		VXL2306	F5 ARM UNIT	1	
48(1)		VXL2394	TAKE UP TENSION REGULATOR	1	
			ARM UNIT		
49(1)		VXL2246	PINCH ARM UNIT	1	
50(1)		VMB2434	TENSION SPRING	1	
51(1)		VXL2309	TENSION ARM (1) UNIT	1	
52(1)		VXZ0310	TENSION BAND UNIT	1	
60(1)		VXR0236	SUPPLY REEL TABLE UNIT	1	
61(1)		VXR0237	TAKE UP REEL TABLE UNIT	1	
62(1)		VXS0241	EARTH PLATE	1	
63(1)		VXZ0312	SUPPLY BRAKE ARM UNIT	1	
64(1)		VXZ0313	TAKE UP BRAKE ARM UNIT	1	
65(1)		2SB1370YD01E	POWER TRANSISTOR	1	
70(1)		VEG1177	CYLINDER UNIT	1	
71(1)		VXP1515	UPPER CYLINDER UNIT	1	
72(1)		VSC4137	CYLINDER SHIELD PLATE	1	
80(1)		VML2680	RELEASE LEVER	1	
81(1)		VMB2013	RELEASE SPRING	1	
B1(1)		VHD0773	SCREW	2	
B2(1)		XTV26+6F	SCREW	5	
B3(1)		XTV26+4F	SCREW	1	
B4(1)		XTN3+8FFZ	SCREW	1	
B5(1)		XTV26+10F	SCREW	1	
B6(1)		VHD0762	SCREW	3	
B7(1)		XTV26+6FZ	SCREW	2	
B8(1)		XTV26+8F	SCREW	2	
B9(1)		XQN2+AJ4	SCREW	2	
B10(1)		VHD0342	SCREW	3	
B11(1)		XVNVC029	SCREW	2	
N1(1)		VHN0192	NUT	3	
N2(1)		VHN0193	NUT	1	
W1(1)		VMX2208	WASHER	3	
W2(1)		XWGV2605G	WASHER	1	

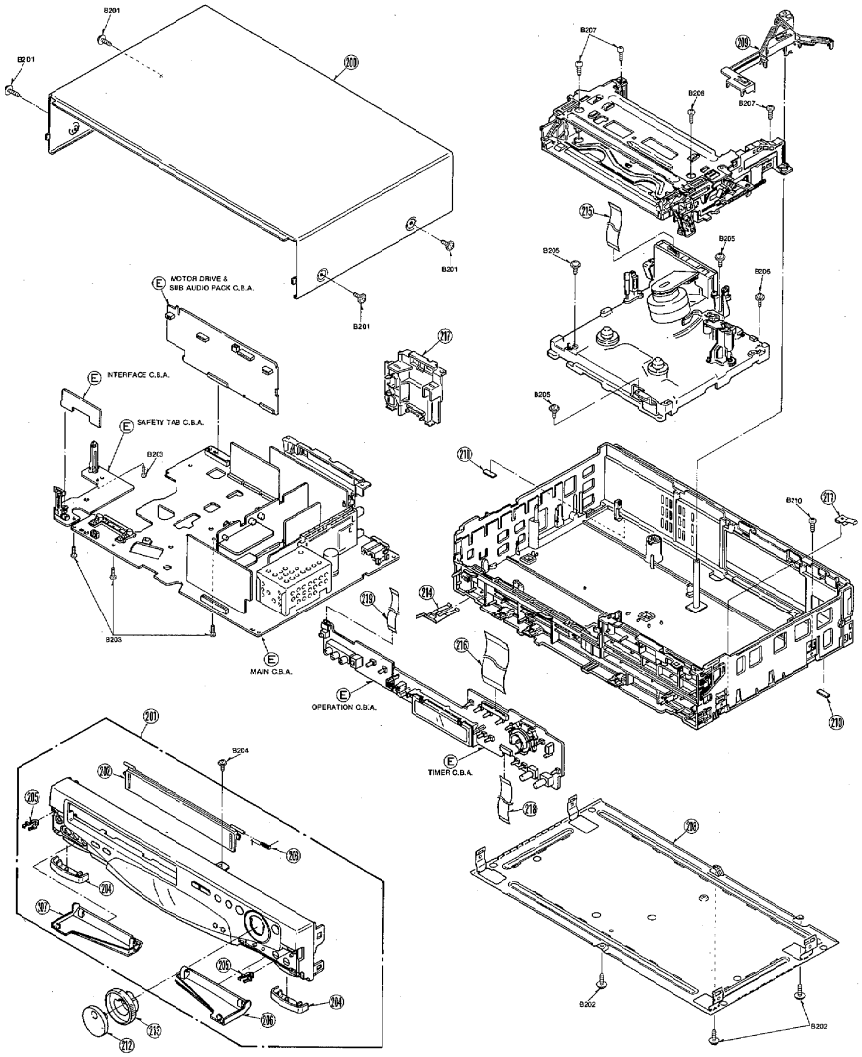
Note: 1. * Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
100(2)		VEK5927	CAPSTAN STATOR UNIT	1	
101(2)		VBK0061	FG HEAD	1	
103(2)		VNA8530	ROTOR STOPPER	1	
104(2)		VMK1527	OIL SEAL	2	
105(2)		VXD0140	HOUSING UNIT	1	
106(2)		VXP1519	CAPSTAN ROTOR UNIT	1	
107(2)		VXQ0297	THRUST SCREW UNIT	1	
108(2)		VDG0913	MAIN CAM GEAR	1	
109(2)		VDG0956	SUPPLY REEL GEAR	1	
110(2)		VDG0957	TAKE UP REEL GEAR	1	
111(2)		VDG0868	WORM WHEEL GEAR	1	
112(2)		VDG0885	SUB CAM GEAR	1	
113(2)		VDV0235	TIMING BELT	1	
120(2)		VDG0866	WORM GEAR	1	
121(2)		VEM0427	LOADING MOTOR (1) UNIT	1	
123(2)		VMD1942	MOTOR BRACKET	1	
125(2)		VML2725	IDLER CONTROL LEVER	1	
127(2)		VSS0355	MODE SW	1	
128(2)		VXA5138	SS BRAKE BASE UNIT	1	
129(2)		VXA4799	TENSION ROLLER UNIT	1	
140(2)		VXL2378	IDLER ARM UNIT	1	
141(2)		VXL2372	DIRECT LEVER UNIT	1	
142(2)		VXL2239	SUPPLY LOADING ARM UNIT	1	
143(2)		VXL2390	TAKE UP LOADING ARM UNIT	1	
144(2)		VXL2307	MAIN LEVER UNIT	1	
145(2)		VXF1409	CENTRE CLUTCH	1	
B102(2)		XTV26-8F	SCREW	1	
B103(2)		XTV26-6F	SCREW	3	
B104(2)		VHD0753	SCREW	4	
B105(2)		VHD0754	SCREW	1	
B106(2)		XSB26-4FZ	SCREW	1	
W101(2)		VMX2208	WASHER	4	

❷ CHASSIS PARTS SECTION (2)



❸ CASING PARTS SECTION



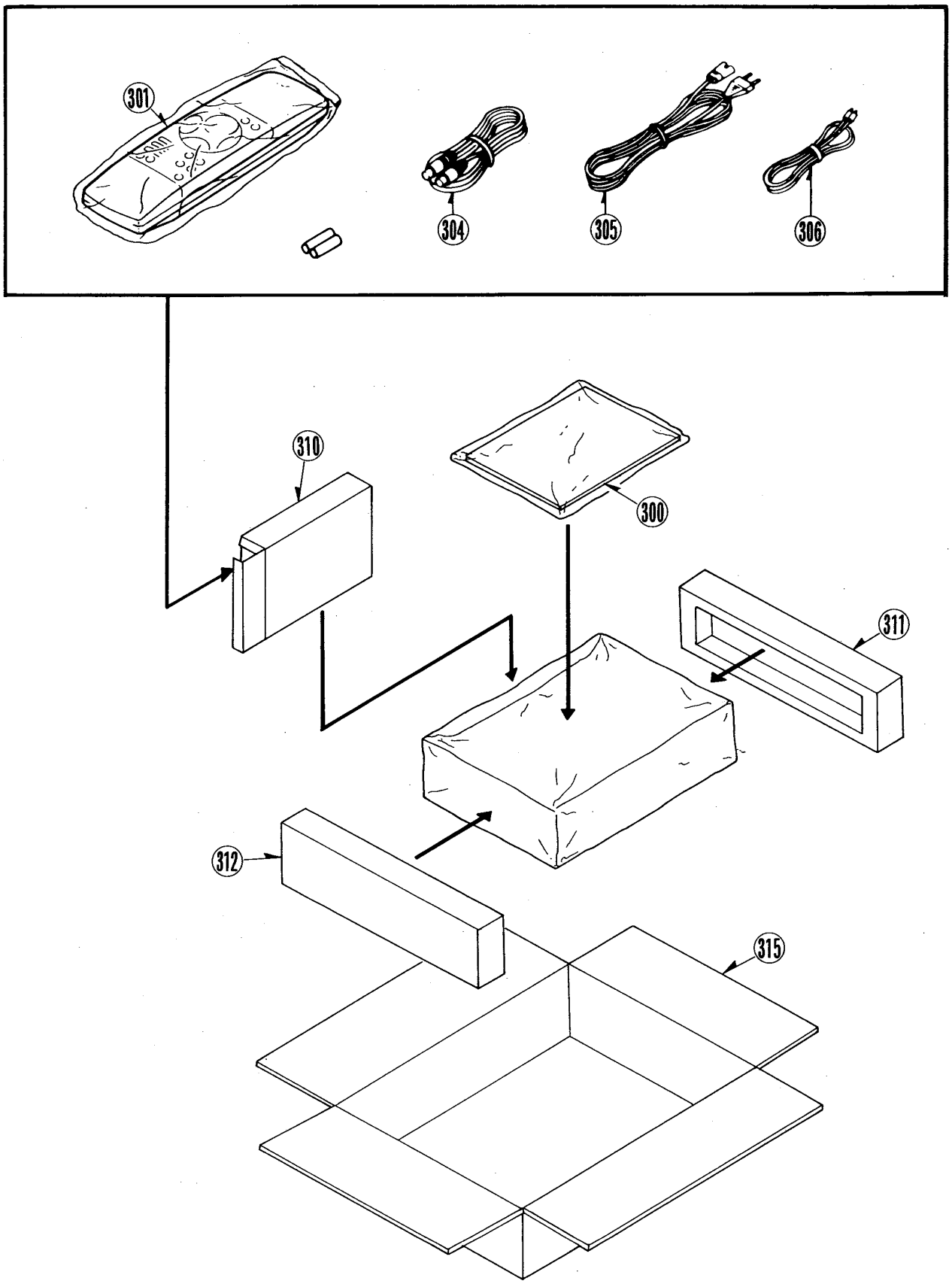
Note: 1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
200(3)		VGM1105	TOP PANEL	1	
201(3)		VYP6125	FRONT PANEL UNIT	1	NV-HD650A
201(3)		VYP6126	FRONT PANEL UNIT	1	NV-HD650EA
202(3)		VKF2260	BLINDER PANEL	1	
203(3)		VMH2521	BLINDER SPRING	1	
204(3)		VKA0176	LEG	2	
205(3)		VGQ0650	DOOR LOCK PIECE	2	
206(3)		VKF2526	FRONT DOOR (R)	1	
207(3)		VYF2184	FRONT DOOR (L) UNIT	1	
208(3)		VKU0404	BOTTOM PLATE	1	
209(3)		VJF1134	PACK HOLDER	1	
210(3)		VKA0122	FOOT	2	
211(3)		VMC1065	EARTH SPRING	1	
212(3)		VGU677C	JOG DIAL	1	
213(3)		VGU6772	SHUTTLE RING	1	
214(3)		VMC1062	JACK EARTH SPRING	1	
215(3)		VWJ0875	FLAT CARD CABLE (2CP)	1	P501-P3OC2
216(3)		VWJ32C5160BB	FLAT CARD CABLE (3CP)	1	P6001-P7501
217(3)		VJH0790	ANTENNA JACK PLATE	1	NV-HD650A
217(3)		VJH0797	ANTENNA JACK PLATE	1	NV-HD650EA
218(3)		VWJ0908	FLAT CARD CABLE (12P)	1	P4001-P7502
219(3)		VWJ0906	FLAT CARD CABLE (8P)	1	P3901-P6501
B201(3)		XTW3+10TFZ	SCREW	4	
B202(3)		VHD0056	SCREW	3	
B203(3)		VHD0772	SCREW	4	
B204(3)		VHD0773	SCREW	1	
B205(3)		VHD0168	SCREW	3	
B206(3)		VHD0874	SCREW	1	
B207(3)		XTV26+8FR	SCREW	3	
B208(3)		XTV26+10F	SCREW	1	
B210(3)		XTN2+8G	SCREW	1	

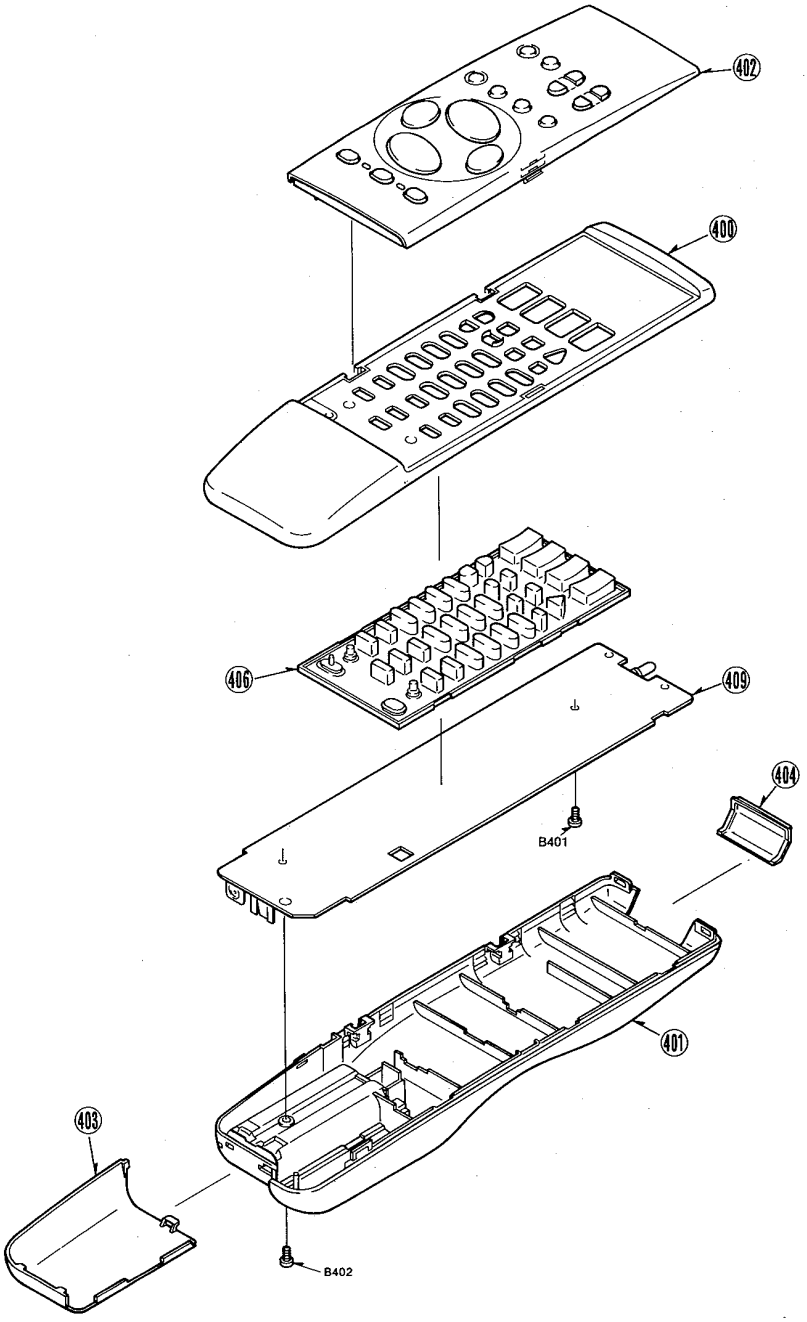
Note: 1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
300(4)		VQT5984	OPERATING INSTRUCTIONS	1	<!>
			(ENGLISH)		
301(4)		VEQ1638	REMOTE CONTROLLER	1	
304(4)		VJA0376	DIN RF CABLE	1	
305(4)		VJA0754	AC CORD	1	<!>
306(4)		VJA0231	AUDIO CABLE	1	
310(4)		VPK1726	ACCESSORIES PAKING	1	
311(4)		VPM4034	CUSHION (R)	1	
312(4)		VPM4035	CUSHION (L)	1	
315(4)		VPG8367	PACKING	1	NV-HD650A
315(4)		VPG8368	PACKING	1	NV-HD650EA
			SERVICE FIXTURES & TOOLS		
		VFJ8125H3F	VHS ALIGNMENT TAPE(PAL)	1	
		VFK0335	RETAINING RING REMOVER	1	
			(3mm/4mm)		
		VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
		VFK0326	HEX WRENCH SET	1	
		VFK0132	BACK TENSION METER	1	
		VFK27	HEAD CLEANING STICK	1	
		VFK1024	MORLYTONE GREASE	1	
		VFK0341	UPPER CYLINDER REMOVER	1	
		VFK0680	WHITE GREASE	1	
		VFK0851	CENTRE FIXING TOOL	1	
		VFK0330	FINE ADJUSTMENT SCREW DRIVER	1	
		VFK1139	20P EXTENSION CABLE	1	
		VFK0678	18P EXTENSION CABLE	2	
		VFK0917	11P EXTENSION CABLE	1	

❹ PACKING PARTS SECTION



❺ REMOTE CONTROLLER UNIT



Note: 1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
400(5)		VYK6261	TOP COVER UNIT	1	
401(5)		VYK5446	BOTTOM COVER UNIT	1	
402(5)		VYK6388	DOOR PANEL UNIT	1	
403(5)		VKF2115	BATTERY COVER	1	
404(5)		VKW1802	IR WINDOW	1	
406(5)		VSP0849	RUBBER CONTACT	1	
409(5)		----------	REMOTE CONTROLLER C.B.A.	1	THE C.B.A. IS NOT
					SUPPLIED AS SPARE
					PART.
B401(5)		XTB2+6G	SCREW	1	
B402(5)		XTB2+8GFZ	SCREW	1	

5-2. ELECTRICAL REPLACEMENT PARTS LIST

Note:1.Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE : Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.
3.Unless otherwise specified,
All resistors are in OHMS , K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf),P=uuF.
4.The P.C.Board units marked width'▮'show below the main assembled parts.
5.The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP06980P	MAIN C.B.A.	1	(RTL)<!>NV-HD650A
			(Page:5-8)		INCLUDING THE
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEP03D27G),
					Hi-Fi AUDIO PACK
					C.B.A.(VEP04447PQ),
					DECODER PACK C.B.A.
					(VEP07784A),
					TV DEMODULATOR PACK
					C.B.A.(VEP07801S).
		VEP03D27G	LUMINANCE & CHROMINANCE	1	(RTL)
			PACK C.B.A.		INCLUDING THE
					S-VHS PB PACK
					C.B.A.(VEP03A03A).
					INCLUDED IN MAIN
					C.B.A.(VEP06980P).
		VEP03A03A	S-VHS PB PACK C.B.A.	1	(RTL)
					INCLUDED IN
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEP03D27G).
		VEP04447PQ	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06980P).
		VEP07784A	DECODER PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06980P).
		VEP07801S	TV DEMODULATOR PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06980P).
		VEP06980Q	MAIN C.B.A.	1	(RTL)<!>NV-HD650EA
			(Page:5-15)		INCLUDING THE
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEP03D27G),
					Hi-Fi AUDIO PACK
					C.B.A.(VEP04447PP),
					NICAM DECODER PACK
					C.B.A.(VEP07787E),
					TV DEMODULATOR PACK
					C.B.A.(VEP07801S).
		VEP03D27G	LUMINANCE & CHROMINANCE	1	(RTL)
			PACK C.B.A.		INCLUDING THE
					S-VHS PB PACK
					C.B.A.(VEP03A03A).
					INCLUDED IN MAIN
					C.B.A.(VEP06980Q).
		VEP03A03A	S-VHS PB PACK C.B.A.	1	(RTL)
					INCLUDED IN
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEP03D27G).
		VEP04447PP	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
					C.B.A.(VEP06980Q).
		VEP07787E	NICAM DECODER PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06980Q).
		VEP07801S	TV DEMODULATOR PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06980Q).
		VEP03B27F	INPUT/OUTPUT C.B.A.	1	(RTL)NV-HD650A
			(Page:5-22)		
		VEP03B27A	INPUT/OUTPUT C.B.A.	1	(RTL)NV-HD650EA
			(Page:5-23)		
		VEP04469N	MOTOR DRIVE C.B.A.	1	(RTL)
			(Page:5-23)		
		VEP05227A	HEAD AMP C.B.A.	1	(RTL)
			(Page:5-24)		
		VEP07773D	TIMER C.B.A.	1	(RTL)NV-HD650A
			(Page:5-25)		
		VEP07773E	TIMER C.B.A.	1	(RTL)NV-HD650EA
			(Page:5-26)		
		VEP06995C	OPERATION C.B.A.	1	(RTL)
			(Page:5-27)		
		VEP00V29A	MAIN INTERFACE C.B.A.	1	(RTL)
			(Page:5-27)		
		VEP00V88A	S-TAB C.B.A.	1	(RTL)
			(Page:5-27)		
		VEX0129	CYLINDER DRIVE C.B.A.	1	(RTL)
			(Page:5-27)		
		----------	MOTOR C.B.A.	1	(RTL)
			(Page:5-27)		
		ENG47228G	TUNER	1	<!>NV-HD650A
		ENG47229G	TUNER	1	<!>NV-HD650EA
F1101		XBA2C16TB0	FUSE	1	<!>
	▮	VEP06980P	MAIN C.B.A.		(RTL)<!>NV-HD650A
C301		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C302		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C303		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C304		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C305		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C306		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C307		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C308		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C309		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C310-12		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C313		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C314		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C315		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C316		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C317		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C318,19		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C321		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C322		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C323		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C324		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C325		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C326		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C327		ECUM1E823KBN	C.CAPACITOR CH 25V 0.082U	1	
C328		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C329		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C331,32		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C333		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C334		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C335		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C336		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C340		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C341		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C342		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C343		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C344		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C345		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C347		ECUM1E154KBM	C.CAPACITOR CH 25V 0.15U	1	
C348		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C349		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C350		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C351		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C352		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C353		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C354		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C355		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C356		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C357		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C358,59		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C360		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C361		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C362		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C363		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C364		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C365		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C366		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C367-72		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	6	
C373		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C374		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C375		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C376		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C378		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C379		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C380		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C381		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C383		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C386		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C387		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C388		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C391		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C392		ECUM1H681KBN	C.CAPACITOR CH 50V 680P	1	
C393		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C394		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C395		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C396		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C0701,02		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0704		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C0706		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0707,08		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0709		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0710		ECUX1H470JPV	C.CAPACITOR CH 50V 47P	1	
C0711		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0712		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0714		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0716		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0717		ECUX1H270JPV	C.CAPACITOR CH 50V 27P	1	
C0718		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0719		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C0720		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0723		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0730		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0732		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1005		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C1006		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1007		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1008		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1009		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1010		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1012		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1013		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1101		ECKMWS471MBH	C.CAPACITOR 470P	1	<!>
C1104		ECKMWS471MBH	C.CAPACITOR 470P	1	<!>
C1107		ECKMWS102MEH	C.CAPACITOR 1000P	1	<!>
C1110		ECQU2A683MN	P.CAPACITOR 250V 0.068U	1	<!>
C1111		ECQU2A154MV	P.CAPACITOR 100V 0.15U	1	<!>
C1112		ECEC2GG680	E.CAPACITOR 400V 68U	1	
C1113		ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
C1114		ECCD3A470KGE	C.CAPACITOR 1kV 47P	1	
C1115		ECA1VXLV470	E.CAPACITOR 35V 47U	1	
C1116		ECA1CXLV470	E.CAPACITOR 16V 47U	1	
C1117		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1118		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C1120		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C1121		ECUM1H391KBN	C.CAPACITOR CH 50V 390P	1	
C1131		EEUFA1E681	E.CAPACITOR 25V 680P	1	
C1132		ECEA1EU221	E.CAPACITOR 25V 220U	1	
C1133		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1134		EEUFA1A122	E.CAPACITOR 10V 1200P	1	
C1135		ECEA1AU331	E.CAPACITOR 10V 330U	1	
C1136		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1137		ECA1HFQ560	E.CAPACITOR 50V 56U	1	
C1138		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1140		ECA1VFQ560	E.CAPACITOR 35V 56U	1	
C1141		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1142		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1143		ECA0JFQ221	E.CAPACITOR 6.3V 220U	1	
C1144,45		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C1147		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C1148		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1149		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1150		ECA1CM101	E.CAPACITOR 16V 100U	1	
C1151		ECEA1EGE470	E.CAPACITOR 25V 47U	1	
C1153		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C1155		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2004		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2005		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2006		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2007		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2008		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2009		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2010,11		ECEA1EKN3R3	E.CAPACITOR 25V 3.3U	2	
C2012		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C2013		ECEA1AKS221	E.CAPACITOR 10V 220U	1	
C2014		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2015		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C2016		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2019		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2021		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2022		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2024,25		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C2030		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2032-34		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	3	
C3001		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3002,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3004		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3006		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3007		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3008		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3009		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3010		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3012		ECEA0JKA330	E.CAPACOTOR 6.3V 33U	1	
C3013,14		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	2	
C3017,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3019		ECUM1H620JCN	C.CAPACITOR CH 50V 62P	1	
C3027		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3028		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3029		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3031		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3032		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3033		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3040		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C3041		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3042,43		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3045		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3046,47		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	2	
C3051		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C3052,53		ECEA0JKA470	E.CAPACITOR 6.3V 47U	2	
C3054		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3055		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3057		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3062		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4002,03		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C4005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4017		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C4034		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4046		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4064		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504		ECEA1CU470	E.CAPACITOR 16V 47U	1	
C4505		ECA1VM470	E.CAPACITOR 35V 47U	1	
C4506		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4514		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4515		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4518		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4521		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4522		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4524		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4528		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4530		ECEA0JU470	E.CAPACITOR 6.3V 47U	1	
C4533		ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4537		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUX1C224ZFV	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4545		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4551		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4556		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4558		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4562		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4563		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4564		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4565		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4568		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4572		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4585,86		ECEA1AU101	E.CAPACITOR 10V 100U	2	
C4591		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4593		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C4594,95		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2	
C4596		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4597		ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4611		ECQB1H562JZ	P.CAPACITOR 50V 5600P	1	
C4616		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4617		ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JZ	P.CAPACITOR 50V 8200P	1	
C4621		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4629		ECQB1H123JZ	P.CAPACITOR 50V 0.012U	1	
C4636		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C4638		ECQB1H272JZ	P.CAPACITOR 50V 2700P	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C5005		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C5006		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C5007-09		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	3	
C5012,13		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C5014		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C5015,16		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6001		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6003		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C6004		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C6005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6006		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6007		ECQV1H334JM	P.CAPACITOR 50V 0.33U	1	
C6009,10		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	2	
C6013		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6016-19		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	4	
C6020		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C6021		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C6023,24		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6027,28		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7302		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C7304		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C7308		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C7309		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C7310		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7311		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7312		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C7313		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7314,15		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	2	
C7320,21		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C7323-25		ECUM1H153KBM	C.CAPACITOR CH 50V 0.015U	3	
C7326		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7328		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C7330		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7332,33		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	2	
C7337		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7339		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7340		ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7341		ECUX1H070DCV	C.CAPACITOR CH 50V 7P	1	
C7345		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7346		ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7347		ECUX1H070DCV	C.CAPACITOR CH 50V 7P	1	
C7349,50		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	2	
C7352		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7353		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C7601		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7602		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7603		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7604		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7605		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7606		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7607		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7608		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
C7609		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7610,11		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7612		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7613		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C7614		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7615		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
D301		1SS283	DIODE	1	
D304		1SS254	DIODE	1	
D305		MA723VT	DIODE	1	
D307		1SS254	DIODE	1	
D309-16		1SS254	DIODE	8	
D1001		MA4051-L	DIODE	1	
D1004		MA4051-L	DIODE	1	
D1005		1SS355	DIODE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D1007,08		1SS355	DIODE	2	
D1102		ERA15-08	DIODE	1	
D1103		AP01C	DIODE	1	
D1104		MA178	DIODE	1	
D1105-07		ERA15-08	DIODE	3	
D1121		RL2Z	DIODE	1	
D1122		21DQ04FC4	DIODE	1	
D1123		ERA22-02	DIODE	1	
D1124		MA185	DIODE	1	
D1125		11EQS04	DIODE	1	
D1126		MA4043-L	DIODE	1	
D1127		1SS355	DIODE	1	
D2003		MA153	DIODE	1	
D2004		1SS355	DIODE	1	
D2005		MA151K	DIODE	1	
D2007		1SS355	DIODE	1	
D3001		1SS355	DIODE	1	
D3007		1SS254	DIODE	1	
D3011,12		1SS355	DIODE	2	
D3014-17		1SS355	DIODE	4	
D4003		1SS254	DIODE	1	
D4004		MA700A	DIODE	1	
D4005		1SS254	DIODE	1	
D4011		1SS254	DIODE	1	
D4013		1SS254	DIODE	1	
D4501-04		MA141K	DIODE	4	
D4602		MA141K	DIODE	1	
D6001		LN59L.VT	LED	1	
D6002,03		1SS254	DIODE	2	
D6004		1SS355	DIODE	1	
D6005		1SS254	DIODE	1	
D6007		MA4075-L	DIODE	1	
D6009		MA151K	DIODE	1	
D6010,11		1SS254	DIODE	2	
D7304		MA29T-B	DIODE	1	
D7305		1SS254	DIODE	1	
D7307		MA151K	DIODE	1	
D7601		MA4300M	DIODE	1	
F1101		XBA2C16TB0	FUSE	1	<!>
IC301		TL8850P	IC	1	
IC302		AN3554NFBP	IC	1	
IC0701		LA7576	IC	1	
IC1001		HA17431PA	IC	1	
IC1101		TDA4605-3	IC	1	
IC1102		SI3120C	IC	1	
IC2001		XRA6887-V3	IC	1	
IC4501		XLH7773AKS	IC	1	
IC4601		BA7755AF	IC	1	
IC6001		MN6755486H4L	IC	1	
IC6002,03		ON1387	PHOTO INTERRUPTER	2	
IC7301		TDA9845	IC	1	
IC7302		TA8721SN	IC	1	
K4		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K303,04		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K308		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K0702		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K0704,05		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
K1003,04		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K1114		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K1118		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3008		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3010		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3014		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3016,17		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K3030		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4001,02		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K4010		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4015		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4017,18		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
K4036		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K6016,17		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K7302		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K7316		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
K7602		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7604		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7623,24		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
L301		VLQ0599J470	COIL 47UH	1	
L302		VLQ0599J100	COIL 10UH	1	
L303		VLQ0599J270	COIL 27UH	1	
L304		VLQ0599J100	COIL 10UH	1	
L305		VLQ0599J680	COIL 68UH	1	
L306,07		VLQ0599J390	COIL 39UH	2	
L308		VLQ0599J150	COIL 15UH	1	
L310		VLQ0599J121	COIL 120UH	1	
L311		VLQ0599J101	COIL 100UH	1	
L312		VLQ0599J8R2	COIL 8.2UH	1	
L313		VLQ0599J680	COIL 68UH	1	
L314		VLQ0599J220	COIL 22UH	1	
L315		VLQ0599J101	COIL 100UH	1	
L316		VLQ0599J470	COIL 47UH	1	
L317		VLQ0599J101	COIL 100UH	1	
L318		VLQ0599J680	COIL 68UH	1	
L319		VLQ0599J270	COIL 27UH	1	
L322		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L323-28		VLP0145	COIL	6	
L330-33		VLP0145	COIL	4	
L334		VLQ0599J390	COIL 39UH	1	
L0701		VLQ0163JR39	COIL 0.39UH	1	
L0705		VLQ0163J5R6	COIL 5.6UH	1	
L0706		VLQEL05T120	COIL 12UH	1	
L1107		ELF18D290A	COIL 29UH	1	<!>
L1108		ELF18D221F	COIL 220UH	1	<!>
L1109		VLP0074	COIL	1	
L1110		VLP0085	COIL	1	
L1121		VLQ0611K220	COIL 22UH	1	
L1122		ELEIN220KA	COIL 22UH	1	
L1123,24		VLQEL05S101K	COIL 100UH	2	
L3001		VLQ0599J3R3	COIL 3.3UH	1	
L3002		VLQ0599J680	COIL 68UH	1	
L3003		VLQ0599J6R8	COIL 6.8UH	1	
L3004		VLQ0599J120	COIL 12UH	1	
L3006		VLQ0599J101	COIL 100UH	1	
L3008		VLQ0599J270	COIL 27UH	1	
L3009		VLQ0599J680	COIL 68UH	1	
L3011		VLQ0599J680	COIL 68UH	1	
L3012,13		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
L4501,02		ELESE101KA	COIL 100UH	2	
L4601		VLQEL07F153	COIL	1	
L5001		VLQ0599J680	COIL 68UH	1	
L5002,03		VLQ0599J270	COIL 27UH	2	
L5004		VLQ0599J150	COIL 15UH	1	
L6001,02		VLQ0599J680	COIL 68UH	2	
L6003		VLQEL05S101K	COIL 100UH	1	
L6004		VLP0083	COIL	1	
L7601,02		VLQ0599J1R0	COIL 1UH	2	
L7603-05		VLQ0599J680	COIL 68UH	3	
L7606		VLQ0599J2R2	COIL 2.2UH	1	
L7607,08		VLQ0599J680	COIL 68UH	2	
P1101		VJS3306	AC INLET	1	<!>
P2001		VJS3316A002	CONNECTOR (FEMALE) 2P	1	
P3002		VJS3537A020G	CONNECTOR (FEMALE) 20P	1	
P4001		VJS3537A012G	CONNECTOR (FEMALE) 12P	1	
P5001		VJR0777B005W	CONNECTOR (MALE) 5P	1	
P6001		VJS3537A032G	CONNECTOR (FEMALE) 32P	1	
P6004		VJS3820	CONNECTOR	1	
PK0701		VJR0816A010W	CONNECTOR (MALE) 10P	1	
PK4001-03		VJR0757B018T	CONNECTOR (MALE) 18P	3	
PK7301		VJR0777B007W	CONNECTOR (MALE) 7P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
PK7302		VJR0777B005W	CONNECTOR (MALE) 5P	1	
PP0701		VJP3589A004B	CONNECTOR (MALE) 4P	1	
PP2001		VJP3042A018W	CONNECTOR (MALE) 18P	1	
PP2002		VJP3042A011W	CONNECTOR (MALE) 11P	1	
PP3901		VJP3042G020W	CONNECTOR (MALE) 20P	1	
PP3902		VJP3042A018W	CONNECTOR (MALE) 18P	1	
PP6005		VJP3043A003W	CONNECTOR (MALE) 3P	1	
PR1101		VSF0015A10	IC PROTECTOR	1	<!>
PS301		VJR0776B009W	CONNECTOR (MALE) 9P	1	
PS302		VJR0776B015W	CONNECTOR (MALE) 15P	1	
PS303		VJR0776B008W	CONNECTOR (MALE) 8P	1	
PS304		VJR0776B003W	CONNECTOR (MALE) 3P	1	
Q301,02		MSD601	TRANSISTOR	2	
Q303,04		MSC2295	TRANSISTOR	2	
Q305		MSB709	TRANSISTOR	1	
Q0701		MSD601-S	TRANSISTOR	1	
Q0702		MSB709	TRANSISTOR	1	
Q1002,03		2SD1996-S	TRANSISTOR	2	
Q1004		2SD1996	TRANSISTOR	1	
Q1006,07		MSD602	TRANSISTOR	2	
Q1101		STP3N60FI-M	IC	1	
Q1102		2SD601A	TRANSISTOR	1	
Q1111		MOC8104FR2	TRANSISTOR	1	<!>
Q3001		XN4501	TRANSISTOR-RESISTOR	1	
Q3002		MSB709	TRANSISTOR	1	
Q3004		MSD601	TRANSISTOR	1	
Q3005		MSC2295	TRANSISTOR	1	
Q3006		MSB709	TRANSISTOR	1	
Q3007		MSC2295	TRANSISTOR	1	
Q3008		2SD1996	TRANSISTOR	1	
Q3009		2SB1322	TRANSISTOR	1	
Q3010		MSB709	TRANSISTOR	1	
Q3011		2SD601A	TRANSISTOR	1	
Q3012		2SB1322	TRANSISTOR	1	
Q3013		MSB709	TRANSISTOR	1	
Q3014		MSD601	TRANSISTOR	1	
Q3016,17		MSC2295	TRANSISTOR	2	
Q3018-20		MSD601	TRANSISTOR	3	
Q3021		MSB709	TRANSISTOR	1	
Q3023		MSC2295	TRANSISTOR	1	
Q4003,04		MSD601	TRANSISTOR	2	
Q4005		MSD1328	TRANSISTOR	1	
Q4501		2SD1991A-R	TRANSISTOR	1	
Q4551		2SB1320A-R	TRANSISTOR	1	
Q4552		2SD1819A	TRANSISTOR	1	
Q4601		2SD1819A	TRANSISTOR	1	
Q5001		MSB709	TRANSISTOR	1	
Q5002		MSD601	TRANSISTOR	1	
Q5003		2SA1022	TRANSISTOR	1	
Q5005		XN1501	TRANSISTOR-TRANSISTOR	1	
Q5006		MSB709	TRANSISTOR	1	
Q5007		MSC2295	TRANSISTOR	1	
Q5008		MSB709	TRANSISTOR	1	
Q5009-13		MSC2295	TRANSISTOR	5	
Q6001		MSB709	TRANSISTOR	1	
Q6002		PN205L-NC.VT	PHOTO TRANSISTOR	1	
Q7301		MSD601-S	TRANSISTOR	1	
QR302		MUN2212	TRANSISTOR	1	
QR303		MUN2213	TRANSISTOR-RESISTOR	1	
QR305		MUN2212	TRANSISTOR	1	
QR306		MUN2213	TRANSISTOR-RESISTOR	1	
QR308		IMH5	TRANSISTOR-RESISTOR	1	
QR310		MUN2213	TRANSISTOR-RESISTOR	1	
QR311		MUN2111	TRANSISTOR-RESISTOR	1	
QR312		MUN2113	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR316		MUN2213	TRANSISTOR-RESISTOR	1	
QR320		XN1212	TRANSISTOR-RESISTOR	1	
QR322		MUN2213	TRANSISTOR-RESISTOR	1	
QR1101		UN2114	TRANSISTOR-RESISTOR	1	
QR3001		MUN2111	TRANSISTOR-RESISTOR	1	
QR3002,03		DTC363EK	TRANSISTOR-RESISTOR	2	
QR3005		MUN2213	TRANSISTOR-RESISTOR	1	
QR3007		MUN2111	TRANSISTOR-RESISTOR	1	
QR3008-18		MUN2212	TRANSISTOR	11	
QR3019		XN4213	TRANSISTOR-RESISTOR	1	
QR3020		MUN2212	TRANSISTOR	1	
QR3021		MUN2211	TRANSISTOR-RESISTOR	1	
QR3023		MUN2213	TRANSISTOR-RESISTOR	1	
QR3026,27		MUN2113	TRANSISTOR-RESISTOR	2	
QR4001		MUN2212	TRANSISTOR	1	
QR4002,03		MUN2213	TRANSISTOR-RESISTOR	2	
QR4005		MUN2213	TRANSISTOR-RESISTOR	1	
QR4508,09		UN5113	TRANSISTOR-RESISTOR	2	
QR4510		UN5212	TRANSISTOR-RESISTOR	1	
QR4602		UN5111	TRANSISTOR-RESISTOR	1	
QR4603		UN5213	TRANSISTOR-RESISTOR	1	
QR6001		XN1211	TRANSISTOR-RESISTOR	1	
QR6002		XN1213	TRANSISTOR-TRANSISTOR	1	
QR6004		UN2114	TRANSISTOR-RESISTOR	1	
QR6005		MUN2113	TRANSISTOR-RESISTOR	1	
QR6009		MUN2112	TRANSISTOR-RESISTOR	1	
QR6010		XN1211	TRANSISTOR-RESISTOR	1	
QR6012		MUN2211	TRANSISTOR-RESISTOR	1	
QR7304		MUN2213	TRANSISTOR-RESISTOR	1	
QR7601		MUN2213	TRANSISTOR-RESISTOR	1	
R301,02		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R303		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R304		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R305		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R306		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R307		ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R308		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R310		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R311		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R312		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R313,14		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R315		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R316		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R317		ERJ6GMYG221	M.RESISTOR CH 1/10W 220	1	
R318		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R319		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R320		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R321		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R324		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R325		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R326		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R327		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R328		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R329		ERJ6GMYG471	M.RESISTOR CH 1/10W 470	1	
R330		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R331		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R332		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R333		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R334		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R336		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R337		ERJ6GMYG201	M.RESISTOR CH 1/10W 200	1	
R339		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R340		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R341		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R342,43		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R344		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R345		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R346		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R347,48		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R349		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R350		ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R351		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R353		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R358		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R359		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R361		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R362		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R363		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R364		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R367		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R369		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R371		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R372		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R373		ERJ6GMYJ334	M.RESISTOR CH 1/10W 330K	1	
R375		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R376		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R377		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R378		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R0702		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R0704		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0709		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R0713		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R0714		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0716		VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R0717		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0718		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0719		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R0720		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0722		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0728		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0729		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0732		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0783		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R1002		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1003		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1004		ERJ6GMYJ114	M.RESISTOR CH 1/10W 110K	1	
R1005		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1006		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R1007		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1101		ERG12SJ153	M.RESISTOR 1/2W 15K	1	
R1102		ERG3SJ563	M.RESISTOR 3W 56K	1	
R1104		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R1105		ERG12SJ153	M.RESISTOR 1/2W 15K	1	
R1107		ERJ6GEYJ164	M.RESISTOR CH 1/10W 160K	1	
R1108		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R1109		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R1110		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R1111		ERDS2FJ102	C.RESISTOR 1/4W 1K	1	
R1112		ERJ8GEYJ304	M.RESISTOR CH 1/8W 300K	1	
R1113		ERJ8GEYJ474	M.RESISTOR CH 1/8W 470K	1	
R1114		ERX12SJR75	M.RESISTOR 1/2W 0.75	1	
R1115		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1116		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R1117		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1118		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
R1122		ERC12AGM334	S.RESISTOR 1/2W 330K	1	
R1123		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R1124		ERJ6GEYK475	M.RESISTOR CH 1/10W 4.7M	1	
R1125		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R1127		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R1128		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1129		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R1131		ERJ6GMYG620	M.RESISTOR CH 1/10W 62	1	
R1132		ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R1135		ERJ8GEYJ274	M.RESISTOR CH 1/8W 270K	1	
R1136		ERJ8GEYJ474	M.RESISTOR CH 1/8W 470K	1	
R1137		ERG12SJ153	M.RESISTOR 1/2W 15K	1	
R2001		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003		ERDS2FJ7R5	C.RESISTOR 1/4W 7.5	1	
R2004		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2005,06		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2007		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2008		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2009		ERDS2FJ7R5	C.RESISTOR 1/4W 7.5	1	
R2010		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2011		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2012		ERDS2FJ6R8	C.RESISTOR 1/4W 6.8	1	
R2013		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2014		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2015		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R2016		ERDS2FJ6R8	C.RESISTOR 1/4W 6.8	1	
R2017		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2023,24		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2026,27		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2028		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2040		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2041		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2042		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2045		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3001,02		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R3003		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3004		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3007		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3008,09		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R3010		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R3011		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3012		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3013		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3014		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3017		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3018		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3019,20		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	2	
R3021		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3022		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3023,24		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	2	
R3025		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3026		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3029		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3030		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3033		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3034		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3037-39		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R3040		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3041		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3042		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3043		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3044		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R3045		ERJ6GMYJ390	M.RESISTOR CH 1/10W 39	1	
R3046		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3047		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3048		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3049		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R3050		ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R3051		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R3052		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R3053		ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R3054		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3055		ERJ6GMYJ823	M.RESISTOR CH 1/10W 82K	1	
R3056		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3057		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3058		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R3059		ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R3060		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R3061		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R3062		ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R3063		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3064,65		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R3066		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3067		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R3068,69		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R3070		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3073		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3076,77		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R3079		ERJ6GMYJ334	M.RESISTOR CH 1/10W 330K	1	
R3080		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4001		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4002		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4003		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4004,05		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R4006,07		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R4008,09		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	2	
R4014		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4018		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4043		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4046		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R4055		ERG2SJ821	M.RESISTOR 2W 820	1	
R4057		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4064-66		ERG1SJ270	M.RESISTOR 1W 27	3	
R4067,68		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	2	
R4071,72		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R4073		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4074		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4075		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4086		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4090,91		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R4092		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4501,02		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503		ERJ3GEYG223	M.RESISTOR CH 1/16W 22K	1	
R4504,05		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4506,07		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R4508		ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4509		VRE0071E622	M.RESISTOR CH 1/10W 6.2K	1	
R4511		ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4512		VRE0071E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4518,19		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4522		ERJ3GEYJ225	M.RESISTOR CH 1/16W 2.2M	1	
R4527		VRE0071E333	M.RESISTOR 33K	1	
R4528		VRE0071E153	M.RESISTOR 15K	1	
R4529		ERJ3GEYG562	M.RESISTOR CH 1/16W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4541		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4542		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553,54		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4558		ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4561		ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4562		VRE0034E10C	M.RESISTOR CH 1/10W	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568,69		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4572		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4573		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0071E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4583		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4585,86		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4593		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4596		ERJ3GEYG473	M.RESISTOR CH 1/16W 47K	1	
R4597		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4598,99		ERJ3GEYG104	M.RESISTOR CH 1/16W 100K	2	
R4603		ERJ3GEYG163	M.RESISTOR CH 1/16W 16K	1	
R4606		VRE0071E562	M.RESISTOR 5.6K	1	
R4610		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4611		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R4612		VRE0071E331	M.RESISTOR CH 1/10W 330	1	
R4613		ERJ3GEYG394	M.RESISTOR CH 1/16W 390K	1	
R4615		VRE0071E133	M.RESISTOR CH 1/10W 13K	1	
R4616		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R4638		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4649		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4651		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R4653		ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R4654		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4655		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R4656		ERJ3GEYG243	M.RESISTOR CH 1/16W 24K	1	
R4657		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R4666		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R4671		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R5003		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R5004		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R5005		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R5006		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R5007		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R5012		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R5013		ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R5014		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	1	
R5016,17		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R5018		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R5019		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R5020		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R5021,22		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R5023		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R5025		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R5027		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R5028,29		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R5030		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R5031		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6001		ERJ6GMYJ201	M.RESISTOR CH 1/10W 200	1	
R6002		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R6003		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6004		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6005		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6006,07		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R6008		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6009		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6010		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R6011,12		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R6013		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6015		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6017		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R6018-20		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	3	
R6021		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6022		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6023		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6024		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R6025		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6026		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6027		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6028		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6029		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6030		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6031		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6032		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6034,35		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6036		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6037,38		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R6040,41		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6042		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6043,44		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R6045		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R6047-50		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	4	
R6051		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6052		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6053-55		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R6056,57		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R6058		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6059		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6060		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R6061		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6062		ERJ6GMYJ244	M.RESISTOR CH 1/10W 240K	1	
R6063,64		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6068		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6069		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6071		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R6072		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6073		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6075-77		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	3	
R6079		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6082		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R6083		ERJ6GMYJ243	M.RESISTOR CH 1/10W 24K	1	
R7302		ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R7303		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R7304		ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R7305		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7307		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R7311		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7313		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R7320		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7323		ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R7324,25		ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R7326		ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R7327		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7328		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7329		ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R7330		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7331		ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R7336		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7337		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R7345		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R7352,53		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R7354,55		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R7358,59		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R7362,63		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R7601		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7602,03		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R7604		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7605-07		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R7608		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7609		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7612		ERG2SJ331	M.RESISTOR 2W 330	1	
R7614		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7615		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7616		ERG2SJ331	M.RESISTOR 2W 330	1	
R7617		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
T0703		EQV5EC071A	TRANSFORMER	1	
T0704		EQV5EC072A	TRANSFORMER	1	
T1101		VLT0750	TRANSFORMER	1	<!>
T7301		EQR7QG028P	TRANSFORMER	1	
T7304		EIS5EC017A	TRANSFORMER	1	
T7305		EQS5EC033A	TRANSFORMER	1	
VR301		EVMEASA00B14	V.RESISTOR	1	
VR302		EVMEASA00B53	V.RESISTOR 5K	1	
VR303		EVMEASA00B24	V.RESISTOR	1	
VR0701		EVNCBAA00B24	V.RESISTOR 20K	1	
VR2001		EVNCYAA03B54	V.RESISTOR 50K	1	
VR3001		EVNCYAA03B23	V.RESISTOR 2K	1	
VR3012,13		EVNCYAA03B52	V.RESISTOR 500	2	
VR3014		EVNCYAA03B54	V.RESISTOR 50K	1	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00BY4	V.RESISTOR	1	
VR4507		EVMEASA00BY4	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4550		EVMECSA00B14	V.RESISTOR 10K	1	
VR4551,52		EVMEASA00B55	V.RESISTOR	2	
VR7301,02		EVNCBAA00B53	V.RESISTOR	2	
VR8001		EVNCYAA03B23	V.RESISTOR 2K	1	
X301		VSX0162	CRYSTAL OSCILLATOR	1	
X0703		EFCT5R5MW5	CRYSTAL OSCILLATOR	1	
X0704		VLF1035	FILTER	1	
X6001		VSX0583	CRYSTAL OSCILLATOR	1	
X7301		EFCS5R5MS5	CRYSTAL OSCILLATOR	1	
X7304		EFCT5R74MS5B	CRYSTAL OSCILLATOR	1	
X7305		VSX0548	CRYSTAL OSCILLATOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			MISCELLANEOUS		
		EYF52BC	FUSE HOLDER	2	<!>
		VSC4141	SW SHIELD COVER	1	
		VMD1926	LED HOLDER	1	FOR D6001
		VMD1927	PHOTO TRANSISTOR HOLDER	1	FOR Q6002
		ENG47228G	TUNER	1	<!>
		VMD2029	REEL GUIDE	1	
		VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODU. C.B.A
	■	VEP06980Q	MAIN C.B.A.		(RTL)<!>NV-HD650EA
C301		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C302		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C303		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C304		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C305		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C306		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C307		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C308		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C309		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C310-12		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C313		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C314		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C315		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C316		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C317		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C318,19		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C321		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C322		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C323		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C324		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C325		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C326		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C327		ECUM1E823KBN	C.CAPACITOR CH 25V 0.082U	1	
C328		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C329		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C331,32		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C333		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C334		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C335		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C336		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C340		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C341		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C342		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C343		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C344		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C345		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C347		ECUM1E154KBM	C.CAPACITOR CH 25V 0.15U	1	
C348		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C349		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C350		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C351		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C352		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C353		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C354		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C355		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C356		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C357		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C358,59		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C360		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C361		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C362		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C363		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C364		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C365		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C366		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C367-72		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	6	
C373		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C374		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C375		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C376		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C378		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C379		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C380		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C381		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C383		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C386		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C387		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C388		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C391		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C392		ECUM1H681KBN	C.CAPACITOR CH 50V 680P	1	
C393		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C394		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C395		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C396		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C0701,02		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0704		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C0706		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0707,08		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0709		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0710		ECUX1H470JPV	C.CAPACITOR CH 50V 47P	1	
C0711		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0712		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0714		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0716		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0717		ECUX1H270JPV	C.CAPACITOR CH 50V 27P	1	
C0718		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0719		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C0720		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0723		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0730		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0732		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1005		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C1006		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1007		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1008		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1009		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1010		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1012		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1013		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1101		ECKMWS471MBH	C.CAPACITOR 470P	1	<!>
C1104		ECKMWS471MBH	C.CAPACITOR 470P	1	<!>
C1107		ECKMWS102MEH	C.CAPACITOR 1000P	1	<!>
C1110		ECQU2A683MN	P.CAPACITOR 250V 0.068U	1	<!>
C1111		ECQU2A154MV	P.CAPACITOR 100V 0.15U	1	<!>
C1112		ECEC2GG680	E.CAPACITOR 400V 68U	1	
C1113		ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
C1114		ECCD3A470KGE	C.CAPACITOR 1kV 47P	1	
C1115		ECA1VXLV470	E.CAPACITOR 35V 47U	1	
C1116		ECA1CXLV470	E.CAPACITOR 16V 47U	1	
C1117		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1118		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C1120		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C1121		ECUM1H391KBN	C.CAPACITOR CH 50V 390P	1	
C1131		EEUFA1E681	E.CAPACITOR 25V 680P	1	
C1132		ECEA1EU221	E.CAPACITOR 25V 220U	1	
C1133		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1134		EEUFA1A122	E.CAPACITOR 10V 1200P	1	
C1135		ECEA1AU331	E.CAPACITOR 10V 330U	1	
C1136		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1137		ECA1HFQ560	E.CAPACITOR 50V 56U	1	
C1138		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1140		ECA1VFQ560	E.CAPACITOR 35V 56U	1	
C1141		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1142		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1143		ECA0JFQ221	E.CAPACITOR 6.3V 220U	1	
C1144,45		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C1147		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C1148		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1149		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1150		ECA1CM101	E.CAPACITOR 16V 100U	1	
C1151		ECEA1EGE470	E.CAPACITOR 25V 47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1153		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C1155		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2004		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2005		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2006		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2007		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2008		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2009		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2010,11		ECEA1EKN3R3	E.CAPACITOR 25V 3.3U	2	
C2012		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C2013		ECEA1AKS221	E.CAPACITOR 10V 220U	1	
C2014		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2015		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C2016		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2019		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2021		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2022		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2024,25		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C2030		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2032-34		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	3	
C3001		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3002,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3004		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3006		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3007		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3008		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3009		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3010		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3012		ECEA0JKA330	E.CAPACOTOR 6.3V 33U	1	
C3013,14		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	2	
C3017,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3019		ECUM1H620JCN	C.CAPACITOR CH 50V 62P	1	
C3027		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3028		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3029		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3031		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3032		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3033		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3040		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C3041		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3042,43		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3045		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3046,47		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	2	
C3051		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C3052,53		ECEA0JKA470	E.CAPACITOR 6.3V 47U	2	
C3054		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3055		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3057		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3062		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4002,03		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C4005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4017		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C4034		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4046		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4064		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504		ECEA1CU470	E.CAPACITOR 16V 47U	1	
C4505		ECA1VM470	E.CAPACITOR 35V 47U	1	
C4506		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4514		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4515		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4518		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4521		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4522		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4524		ECEA1AU101	E.CAPACITOR 10V 100U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4528		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4530		ECEA0JU470	E.CAPACITOR 6.3V 47U	1	
C4533		ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4537		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUX1C224ZFV	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4545		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4551		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4556		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4558		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4562		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4563		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4564		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4565		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4568		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4572		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4585,86		ECEA1AU101	E.CAPACITOR 10V 100U	2	
C4591		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4593		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C4594,95		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2	
C4596		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4597		ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4616		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JZ	P.CAPACITOR 50V 8200P	1	
C4621		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4629		ECQB1H822JZ	P.CAPACITOR 50V 8200P	1	
C4636		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C4638		ECQB1H822JZ	P.CAPACITOR 50V 8200P	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C5005		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C5006		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C5007-09		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	3	
C5012,13		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C5014		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C5015,16		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6001		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6003		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C6004		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C6005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6006		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6007		ECQV1H334JM	P.CAPACITOR 50V 0.33U	1	
C6009,10		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	2	
C6013		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6016-19		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	4	
C6020		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C6021		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C6023,24		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6027,28		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7301,02		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7303		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C7304		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7305		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C7306		ECUX1H391JCV	C.CAPACITOR CH 50V 390P	1	
C7309-12		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	4	
C7313		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7314		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7315		ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C7317		ECUX1H090DCV	C.CAPACITOR CH 50V 90P	1	
C7319		ECRHA020D54R	V.CAPACITOR	1	
C7320		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7321		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7322		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C7323,24		ECUX1H391JCV	C.CAPACITOR CH 50V 390P	2	
C7325,26		ECEA1CKA100	E.CAPACITOR 16V 10U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7327		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C7328		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C7329,30		ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C7331		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7332,33		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C7334		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7335		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C7338		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C7339		ECUM1H182KBM	C.CAPACITOR CH 50V 1800P	1	
C7340		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7341		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7342		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C7343		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C7344		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C7345		ECUM1H182KBM	C.CAPACITOR CH 50V 1800P	1	
C7346		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7347		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7348		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C7350		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C7351		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C7352		ECUM1H182KBM	C.CAPACITOR CH 50V 1800P	1	
C7353		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7354		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7355		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C7357		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C7358		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C7359		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C7365,66		ECEA1HKA010	E.CAPACITOR 50V 1U	2	
C7369		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7370		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C7371,72		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7374,75		ECUX1H150JCV	C.CAPACITOR 5V 15P	2	
C7601		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7602		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7603		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7604		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7605		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7606		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7607		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7608		ERJ6GM20R00	M.RESISTOR CH 1/10W 0	1	
C7609		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7612		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7613		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C7614		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7615		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C7621-23		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
D301		1SS283	DIODE	1	
D304		1SS254	DIODE	1	
D305		MA723VT	DIODE	1	
D307		1SS254	DIODE	1	
D309-16		1SS254	DIODE	8	
D1001		MA4051-L	DIODE	1	
D1004		MA4051-L	DIODE	1	
D1005		1SS355	DIODE	1	
D1007,08		1SS355	DIODE	2	
D1102		ERA15-08	DIODE	1	
D1103		APO1C	DIODE	1	
D1104		MA178	DIODE	1	
D1105-07		ERA15-08	DIODE	3	
D1121		RL2Z	DIODE	1	
D1122		21DQ04FC4	DIODE	1	
D1123		ERA22-02	DIODE	1	
D1124		MA185	DIODE	1	
D1125		11EQS04	DIODE	1	
D1126		MA4043-L	DIODE	1	
D1127		1SS355	DIODE	1	
D2003		MA153	DIODE	1	
D2004		1SS355	DIODE	1	
D2005		MA151K	DIODE	1	
D2007		1SS355	DIODE	1	
D3001		1SS355	DIODE	1	
D3007		1SS254	DIODE	1	
D3011,12		1SS355	DIODE	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D3014-17		1SS355	DIODE	4	
D4003		1SS254	DIODE	1	
D4005		1SS254	DIODE	1	
D4011		1SS254	DIODE	1	
D4013		1SS254	DIODE	1	
D4501-04		MA141K	DIODE	4	
D4602		MA141K	DIODE	1	
D6001		LN59L.VT	LED	1	
D6002,03		1SS254	DIODE	2	
D6004		1SS355	DIODE	1	
D6005		1SS254	DIODE	1	
D6007		MA4075-L	DIODE	1	
D6009		MA151K	DIODE	1	
D6010,11		1SS254	DIODE	2	
D7301		MA3082-L	DIODE	1	
D7302		MA151K	DIODE	1	
D7303		MA151WK	DIODE	1	
D7304		MA717	DIODE	1	
D7306		MA151K	DIODE	1	
D7601		MA4300M	DIODE	1	
F1101		XBA2C16TB0	FUSE	1	<!>
FL7301,02		VLF0633	FILTER	2	
IC301		TL8850P	IC	1	
IC302		AN3554NFBP	IC	1	
IC0701		LA7576	IC	1	
IC1001		HA17431PA	IC	1	
IC1101		TDA4605-3	IC	1	
IC1102		SI3120C	IC	1	
IC2001		XRA6887-V3	IC	1	
IC4501		XLH7773AKS	IC	1	
IC4601		BA7755AF	IC	1	
IC6001		MN6755486H4L	IC	1	
IC6002,03		ON1387	PHOTO INTERRUPTER	2	
IC7301		MSP3410-15	IC	1	
IC7302		PST7043	IC	1	
IC7303		M5238FP	IC	1	
IC7304		HA17431PA	IC	1	
IC7305		MN155402VZBZ	IC	1	
IC7306		PST7043	IC	1	
K4		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K303,04		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K308		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K0702		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K0704,05		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
K1003,04		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K1114		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K1118		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3008		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3010		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3014		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3016,17		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K3030		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4001,02		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K4010		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4015		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4017,18		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K4036		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K6016,17		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K7304-07		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
K7314		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K7317		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K7622,23		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
L301		VLQ0599J470	COIL 47UH	1	
L302		VLQ0599J100	COIL 10UH	1	
L303		VLQ0599J270	COIL 27UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L304		VLQ0599J100	COIL 10UH	1	
L305		VLQ0599J680	COIL 68UH	1	
L306,07		VLQ0599J390	COIL 39UH	2	
L308		VLQ0599J150	COIL 15UH	1	
L310		VLQ0599J121	COIL 120UH	1	
L311		VLQ0599J101	COIL 100UH	1	
L312		VLQ0599J8R2	COIL 8.2UH	1	
L313		VLQ0599J680	COIL 68UH	1	
L314		VLQ0599J220	COIL 22UH	1	
L315		VLQ0599J101	COIL 100UH	1	
L316		VLQ0599J470	COIL 47UH	1	
L317		VLQ0599J101	COIL 100UH	1	
L318		VLQ0599J680	COIL 68UH	1	
L319		VLQ0599J270	COIL 27UH	1	
L322		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L323-28		VLP0145	COIL	6	
L330-33		VLP0145	COIL	4	
L334		VLQ0599J390	COIL 39UH	1	
L0701		VLQ0163JR39	COIL 0.39UH	1	
L0705		VLQ0163J5R6	COIL 5.6UH	1	
L0706		VLQEL05T120	COIL 12UH	1	
L1107		ELF18D290A	COIL 29UH	1	<!>
L1108		ELF18D221F	COIL 220UH	1	<!>
L1109		VLP0074	COIL	1	
L1110		VLP0085	COIL	1	
L1121		VLQ0611K220	COIL 22UH	1	
L1122		ELELN220KA	COIL 22UH	1	
L1123,24		VLQEL05S101K	COIL 100UH	2	
L3001		VLQ0599J3R3	COIL 3.3UH	1	
L3002		VLQ0599J680	COIL 68UH	1	
L3003		VLQ0599J6R8	COIL 6.8UH	1	
L3004		VLQ0599J120	COIL 12UH	1	
L3006		VLQ0599J101	COIL 100UH	1	
L3008		VLQ0599J270	COIL 27UH	1	
L3009		VLQ0599J680	COIL 68UH	1	
L3011		VLQ0599J680	COIL 68UH	1	
L3012,13		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
L4501,02		ELESE101KA	COIL 100UH	2	
L4601		VLQEL07F153	COIL	1	
L5001		VLQ0599J680	COIL 68UH	1	
L5002,03		VLQ0599J270	COIL 27UH	2	
L5004		VLQ0599J150	COIL 15UH	1	
L6001,02		VLQ0599J680	COIL 68UH	2	
L6003		VLQEL05S101K	COIL 100UH	1	
L6004		VLP0083	COIL	1	
L7301		ELEXH100JBV	COIL 10UH	1	
L7302		VLP0150	INDUCTOR	1	
L7601,02		VLQ0599J1R0	COIL 1UH	2	
L7603-05		VLQ0599J680	COIL 68UH	3	
L7606		VLQ0599J2R2	COIL 2.2UH	1	
L7607,08		VLQ0599J680	COIL 68UH	2	
L7609		VLQ0188KR27	COIL 0.27UH	1	
P1101		VJS3306	AC INLET	1	<!>
P2001		VJS3316A002	CONNECTOR (FEMALE) 2P	1	
P3002		VJS3537A020G	CONNECTOR (FEMALE) 20P	1	
P4001		VJS3537A012G	CONNECTOR (FEMALE) 12P	1	
P5001		VJR0777B005W	CONNECTOR (MALE) 5P	1	
P6001		VJS3537A032G	CONNECTOR (FEMALE) 32P	1	
P6004		VJS3820	CONNECTOR	1	
PK0701		VJR0816A010W	CONNECTOR (MALE) 10P	1	
PK4001-03		VJR0757B018T	CONNECTOR (MALE) 18P	3	
PK7301		VJR0777B009W	CONNECTOR (MALE) 9P	1	
PK7302		VJR0777B008W	CONNECTOR (MALE) 8P	1	
PP0701		VJP3589A004B	CONNECTOR (MALE) 4P	1	
PP2001		VJP3042A018W	CONNECTOR (MALE) 18P	1	
PP2002		VJP3042A011W	CONNECTOR (MALE) 11P	1	
PP3901		VJP3042G020W	CONNECTOR (MALE) 20P	1	
PP3902		VJP3042A018W	CONNECTOR (MALE) 18P	1	
PP6005		VJP3043A003W	CONNECTOR (MALE) 3P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
PR1101		VSF0015A10	IC PROTECTOR	1	<!>
PS301		VJR0776B009W	CONNECTOR (MALE) 9P	1	
PS302		VJR0776B015W	CONNECTOR (MALE) 15P	1	
PS303		VJR0776B008W	CONNECTOR (MALE) 8P	1	
PS304		VJR0776B003W	CONNECTOR (MALE) 3P	1	
Q301,02		MSD601	TRANSISTOR	2	
Q303,04		MSC2295	TRANSISTOR	2	
Q305		MSB709	TRANSISTOR	1	
Q0701		MSD601-S	TRANSISTOR	1	
Q0702		MSB709	TRANSISTOR	1	
Q1002,03		2SD1996-S	TRANSISTOR	2	
Q1004		2SD1996	TRANSISTOR	1	
Q1007		MSD602	TRANSISTOR	1	
Q1101		STP3N60FI-M	IC	1	
Q1102		2SD601A	TRANSISTOR	1	
Q1111		MOC8104FR2	TRANSISTOR	1	<!>
Q3001		XN4501	TRANSISTOR-RESISTOR	1	
Q3002		MSB709	TRANSISTOR	1	
Q3004		MSD601	TRANSISTOR	1	
Q3005		MSC2295	TRANSISTOR	1	
Q3006		MSB709	TRANSISTOR	1	
Q3007		MSC2295	TRANSISTOR	1	
Q3008		2SD1996	TRANSISTOR	1	
Q3009		2SB1322	TRANSISTOR	1	
Q3010		MSB709	TRANSISTOR	1	
Q3011		2SD601A	TRANSISTOR	1	
Q3012		2SB1322	TRANSISTOR	1	
Q3013		MSB709	TRANSISTOR	1	
Q3014		MSD601	TRANSISTOR	1	
Q3016,17		MSC2295	TRANSISTOR	2	
Q3018-20		MSD601	TRANSISTOR	3	
Q3021		MSB709	TRANSISTOR	1	
Q3023		MSC2295	TRANSISTOR	1	
Q4003,04		MSD601	TRANSISTOR	2	
Q4005		MSD1328	TRANSISTOR	1	
Q4501		2SD1991A-R	TRANSISTOR	1	
Q4551		2SB1320A-R	TRANSISTOR	1	
Q4552		2SD1819A	TRANSISTOR	1	
Q5001		MSB709	TRANSISTOR	1	
Q5002		MSD601	TRANSISTOR	1	
Q5003		2SA1022	TRANSISTOR	1	
Q5005		XN1501	TRANSISTOR-TRANSISTOR	1	
Q5006		MSB709	TRANSISTOR	1	
Q5007		MSC2295	TRANSISTOR	1	
Q5008		MSB709	TRANSISTOR	1	
Q5009-13		MSC2295	TRANSISTOR	5	
Q6001		MSB709	TRANSISTOR	1	
Q6002		PN205L-NC.VT	PHOTO TRANSISTOR	1	
Q7301,02		2SD1996	TRANSISTOR	2	
Q7304		2SC2404-D	TRANSISTOR	1	
Q7305		MSD601-S	TRANSISTOR	1	
Q7308-10		2SB709A	TRANSISTOR	3	
Q7311-13		MSD1328-S	TRANSISTOR	3	
Q7601		2SB709A-R	TRANSISTOR	1	
QR302		MUN2212	TRANSISTOR	1	
QR303		MUN2213	TRANSISTOR-RESISTOR	1	
QR305		MUN2212	TRANSISTOR	1	
QR306		MUN2213	TRANSISTOR-RESISTOR	1	
QR308		IMH5	TRANSISTOR-RESISTOR	1	
QR310		MUN2213	TRANSISTOR-RESISTOR	1	
QR311		MUN2111	TRANSISTOR-RESISTOR	1	
QR312		MUN2113	TRANSISTOR-RESISTOR	1	
QR316		MUN2213	TRANSISTOR-RESISTOR	1	
QR320		XN1212	TRANSISTOR-RESISTOR	1	
QR322		MUN2213	TRANSISTOR-RESISTOR	1	
QR1101		UN2114	TRANSISTOR-RESISTOR	1	
QR3001		MUN2111	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR3002,03		DTC363EK	TRANSISTOR-RESISTOR	2	
QR3005		MUN2213	TRANSISTOR-RESISTOR	1	
QR3007		MUN2111	TRANSISTOR-RESISTOR	1	
QR3008-18		MUN2212	TRANSISTOR	11	
QR3019		XN4213	TRANSISTOR-RESISTOR	1	
QR3020		MUN2212	TRANSISTOR	1	
QR3021		MUN2211	TRANSISTOR-RESISTOR	1	
QR3023		MUN2213	TRANSISTOR-RESISTOR	1	
QR3026,27		MUN2113	TRANSISTOR-RESISTOR	2	
QR4001		MUN2212	TRANSISTOR	1	
QR4002,03		MUN2213	TRANSISTOR-RESISTOR	2	
QR4005		MUN2213	TRANSISTOR-RESISTOR	1	
QR4508,09		UN5113	TRANSISTOR-RESISTOR	2	
QR4510		UN5212	TRANSISTOR-RESISTOR	1	
QR6001		XN1211	TRANSISTOR-RESISTOR	1	
QR6002		XN1213	TRANSISTOR-TRANSISTOR	1	
QR6004		UN2114	TRANSISTOR-RESISTOR	1	
QR6005		MUN2113	TRANSISTOR-RESISTOR	1	
QR6009		MUN2112	TRANSISTOR-RESISTOR	1	
QR6010		XN1211	TRANSISTOR-RESISTOR	1	
QR6012		MUN2211	TRANSISTOR-RESISTOR	1	
QR7301		MUN2213	TRANSISTOR-RESISTOR	1	
QR7302		MUN2112	TRANSISTOR-RESISTOR	1	
QR7601		MUN2213	TRANSISTOR-RESISTOR	1	
R301,02		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R303		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R304		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R305		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R306		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R307		ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R308		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R310		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R311		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R312		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R313,14		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R315		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R316		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R317		ERJ6GMYG221	M.RESISTOR CH 1/10W 220	1	
R318		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R319		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R320		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R321		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R324		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R325		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R326		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R327		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R328		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R329		ERJ6GMYG471	M.RESISTOR CH 1/10W 470	1	
R330		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R331		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R332		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R333		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R334		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R336		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R337		ERJ6GMYG201	M.RESISTOR CH 1/10W 200	1	
R339		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R340		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R341		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R342,43		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R344		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R345		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R346		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R347,48		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R349		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R350		ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M	1	
R351		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R353		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R358		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R359		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R361		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R362		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R363		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R364		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R367		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R369		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R371		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R372		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R373		ERJ6GMYJ334	M.RESISTOR CH 1/10W 330K	1	
R375		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R376		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R377		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R378		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R0702		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R0704		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0709		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R0713		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R0714		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0716		VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R0717		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0718		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0719		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R0720		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0722		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0728		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0729		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0732		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0783		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R1002		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1003		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1004		ERJ6GMYJ114	M.RESISTOR CH 1/10W 110K	1	
R1005		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1006		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R1007		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1101		ERG12SJ153	M.RESISTOR 1/2W 15K	1	
R1102		ERG3SJ563	M.RESISTOR 3W 56K	1	
R1104		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R1105		ERG12SJ153	M.RESISTOR 1/2W 15K	1	
R1107		ERJ6GEYJ164	M.RESISTOR CH 1/10W 160K	1	
R1108		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R1109		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R1110		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R1111		ERDS2FJ102	C.RESISTOR 1/4W 1K	1	
R1112		ERJ8GEYJ304	M.RESISTOR CH 1/8W 300K	1	
R1113		ERJ8GEYJ474	M.RESISTOR CH 1/8W 470K	1	
R1114		ERX12SJR75	M.RESISTOR 1/2W 0.75	1	
R1115		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1116		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R1117		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1118		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
R1122		ERC12AGM334	S.RESISTOR 1/2W 330K	1	
R1123		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R1124		ERJ6GEYK475	M.RESISTOR CH 1/10W 4.7M	1	
R1125		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R1127		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R1128		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1129		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R1131		ERJ6GMYG620	M.RESISTOR CH 1/10W 62	1	
R1132		ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R1135		ERJ8GEYJ274	M.RESISTOR CH 1/8W 270K	1	
R1136		ERJ8GEYJ474	M.RESISTOR CH 1/8W 470K	1	
R1137		ERG12SJ153	M.RESISTOR 1/2W 15K	1	
R2001		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003		ERDS2FJ7R5	C.RESISTOR 1/4W 7.5	1	
R2004		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2005,06		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2007		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2008		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2009		ERDS2FJ7R5	C.RESISTOR 1/4W 7.5	1	
R2010		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2011		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2012		ERDS2FJ6R8	C.RESISTOR 1/4W 6.8	1	
R2013		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2014		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2015		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R2016		ERDS2FJ6R8	C.RESISTOR 1/4W 6.8	1	
R2017		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2023,24		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2026,27		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2028		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2040		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2041		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2042		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2045		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3001,02		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R3003		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3004		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3007		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3008,09		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R3010		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R3011		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3012		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3013		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3014		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3017		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3018		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3019,20		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	2	
R3021		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3022		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3023,24		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	2	
R3025		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3026		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3029		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3030		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3033		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3034		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3037-39		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R3040		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3041		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3042		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3043		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3044		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R3045		ERJ6GMYJ390	M.RESISTOR CH 1/10W 39	1	
R3046		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3047		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3048		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3049		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R3050		ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R3051		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R3052		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R3053		ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R3054		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3055		ERJ6GMYJ823	M.RESISTOR CH 1/10W 82K	1	
R3056		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3057		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3058		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R3059		ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R3060		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R3061		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R3062		ERJ6GMYG302	M.RESISTOR CH 1/10W 3K	1	
R3063		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3064,65		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R3066		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3067		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R3068,69		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R3070		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3073		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3076,77		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R3079		ERJ6GMYJ334	M.RESISTOR CH 1/10W 330K	1	
R3080		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4001		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4003		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4004,05		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R4006,07		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R4008,09		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	2	
R4014		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4018		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4043		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4046		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R4055		ERG2SJ821	M.RESISTOR 2W 820	1	
R4057		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4064-66		ERG1SJ270	M.RESISTOR 1W 27	3	
R4067,68		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	2	
R4071,72		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R4073		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4074		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4075		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4086		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4090,91		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R4092		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4501,02		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503		ERJ3GEYG223	M.RESISTOR CH 1/16W 22K	1	
R4504,05		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4506,07		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R4508		ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4509		VRE0071E622	M.RESISTOR CH 1/10W 6.2K	1	
R4511		ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4512		VRE0071E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4518,19		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4522		ERJ3GEYJ225	M.RESISTOR CH 1/16W 2.2M	1	
R4527		VRE0071E333	M.RESISTOR 33K	1	
R4528		VRE0071E153	M.RESISTOR 15K	1	
R4529		ERJ3GEYG562	M.RESISTOR CH 1/16W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4541		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4542		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553,54		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4558		ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4561		ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4562		VRE0034E10C	M.RESISTOR CH 1/10W	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568,69		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4572		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4573		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0071E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4583		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4585,86		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4593		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4596		ERJ3GEYG473	M.RESISTOR CH 1/16W 47K	1	
R4597		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4598,99		ERJ3GEYG104	M.RESISTOR CH 1/16W 100K	2	
R4603		ERJ3GEYG163	M.RESISTOR CH 1/16W 16K	1	
R4606		VRE0071E562	M.RESISTOR 5.6K	1	
R4610		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4611		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R4612		VRE0071E331	M.RESISTOR CH 1/10W 330	1	
R4613		ERJ3GEYG394	M.RESISTOR CH 1/16W 390K	1	
R4615		VRE0071E133	M.RESISTOR CH 1/10W 13K	1	
R4616		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R4638		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4649		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R4653		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R4656		ERJ3GEYG243	M.RESISTOR CH 1/16W 24K	1	
R4657		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R4666		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R4671		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R5003		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R5004		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R5005		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R5006		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R5007		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R5012		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R5013		ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R5014		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	1	
R5016,17		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R5018		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R5019		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R5020		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R5021,22		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R5023		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R5025		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R5027		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R5028,29		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R5030		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R5031		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6001		ERJ6GMYJ201	M.RESISTOR CH 1/10W 200	1	
R6002		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R6003		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6004		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6005		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6006,07		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R6008		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6009		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6010		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R6011,12		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R6013		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6015		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6017		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R6018-20		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	3	
R6021		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6022		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6023		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6024		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R6025		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6026		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6027		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6028		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6029		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6030		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6031		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6032		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6034,35		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6036		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6037,38		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R6040,41		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6042		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6043,44		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R6045		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R6047-50		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	4	
R6051		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6052		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6053-55		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R6056,57		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R6058		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6059		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6060		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R6061		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6062		ERJ6GMYJ244	M.RESISTOR CH 1/10W 240K	1	
R6063,64		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6068		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R6069		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6071		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R6072		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R6073		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6075		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6077		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6079		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6082		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R6083		ERJ6GMYJ243	M.RESISTOR CH 1/10W 24K	1	
R7301		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7302		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7303		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R7308		ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R7309,10		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7311		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7312		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7313,14		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	2	
R7315		ERJ3GEYJ114	M.RESISTOR CH 1/16W 110K	1	
R7316		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R7317		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R7320		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7321-23		ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	3	
R7324		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7325		ERJ3GEYG122	M.RESISTOR CH 1/16W 1.2K	1	
R7326		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7327-29		ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	3	
R7330		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7332		ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R7333		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7334-36		ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	3	
R7337		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7339		ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R7341-43		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	3	
R7344		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7346		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R7350		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7351		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R7352-56		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	5	
R7357		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7362		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R7366		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7367		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7368,69		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R7370		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7371		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7376,77		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R7378		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R7379		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7380		ERJ3GEYG302	M.RESISTOR CH 1/16W 3K	1	
R7381		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7382		ERJ3GEYG302	M.RESISTOR CH 1/16W 3K	1	
R7383		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7384		ERJ3GEYG302	M.RESISTOR CH 1/16W 3K	1	
R7601		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7602,03		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R7604		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7605-07		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R7608		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7609		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7610		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7611		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7612		ERG2SJ331	M.RESISTOR 2W 330	1	
R7614		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7615		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7616		ERG2SJ331	M.RESISTOR 2W 330	1	
R7617		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
T0703		EQV5EC071A	TRANSFORMER	1	
T0704		EQV5EC072A	TRANSFORMER	1	
T1101		VLT0750	TRANSFORMER	1	<!>
VR301		EVMEASA00B14	V.RESISTOR	1	
VR302		EVMEASA00B53	V.RESISTOR 5K	1	
VR303		EVMEASA00B24	V.RESISTOR	1	
VR0701		EVNCBAA00B24	V.RESISTOR 20K	1	
VR2001		EVNCYAA03B54	V.RESISTOR 50K	1	
VR3001		EVNCYAA03B23	V.RESISTOR 2K	1	
VR3012,13		EVNCYAA03B52	V.RESISTOR 500	2	
VR3014		EVNCYAA03B54	V.RESISTOR 50K	1	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00BY4	V.RESISTOR	1	
VR4507		EVMEASA00BY4	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4550		EVMECSA00B14	V.RESISTOR 10K	1	
VR4551,52		EVMEASA00B55	V.RESISTOR	2	
VR8001		EVNCYAA03B23	V.RESISTOR 2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
X301		VSX0162	CRYSTAL OSCILLATOR	1	
X0703		EFCT5R5MW5	CRYSTAL OSCILLATOR	1	
X0704		VLF1035	FILTER	1	
X6001		VSX0583	CRYSTAL OSCILLATOR	1	
X7302		VSX0683	CRYSTAL OSCILLATOR	1	
X7303		EFOGC4004A4	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		EYF52BC	FUSE HOLDER	2	<!>
		VSC4141	SW SHIELD COVER	1	
		VMD1926	LED HOLDER	1	FOR D6001
		VMD1927	PHOTO TRANSISTOR HOLDER	1	FOR Q6002
		ENG47229G	TUNER	1	<!>
		VMD2029	REEL GUIDE	1	
		VSC3553	SHIELD COVER (MAIN)	1	FOR NICAM C.B.A.
		VSC3555	SHIELD COVER (BOTTOM)	1	FOR NICAM C.B.A.
		VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODU. C.B.A.
	■	VEP03B27F	INPUT/OUTPUT C.B.A.		(RTL)NV-HD650A
C3901		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3902		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3903		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3904		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3905		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3908,09		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	2	
C3910		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3911		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C7701		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C7702		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C7703		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C7704		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C7705,06		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7707		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C7708		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C7709		ECUM1H300JCN	C.CAPACITOR CH 50V 30P	1	
C7710		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7711		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7716		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7717		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
D3901		MA4056M	DIODE	1	
D7701		SVC251SPA	DIODE	1	
IC3901		MC14051BF	IC	1	
IC3902		MC14052BF	IC	1	
IC7701		UPD6464CS505	IC	1	
K7701		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
K7703		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
L3901		VLQ0599J330	COIL 33UH	1	
L3902		VLQ0599J680	COIL 68UH	1	
L3903		VLQ0599J101	COIL 100UH	1	
L7701		VLQ0599J4R7	COIL 4.7UH	1	
L7702-04		VLQ0599J330	COIL 33UH	3	
P3901		VJS3537B008G	CONNECTOR (FEMALE) 8P	1	
PS3901		VJS3042B020W	CONNECTOR (FEMALE)	1	
PS3902		VJS3042B018W	CONNECTOR (FEMALE) 18P	1	
Q3901		2SB709A	TRANSISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3901		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3902		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3903		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3904		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3905,06		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	2	
R3907		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3908,09		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3910-13		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	4	
R7701		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7702		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7703		ERJ6GEYJ512	M.RESISTOR CH 1/10W 5.1K	1	
S3901		ESD172253	SWITCH	1	
			MISCELLANEOUS		
		VEJ1681	I/O JACK PLATE	1	
	■	VEP03B27A	INPUT/OUTPUT C.B.A.		(RTL)NV-HD650EA
C3901		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3902		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3903		ECAOJM471	E.CAPACITOR 6.3V 470U	1	
C3904		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3905		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3908,09		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	2	
C3910		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3911		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C7701		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C7702		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C7703		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C7704		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C7705,06		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7707		ECEAOJKA220	E.CAPACITOR 6.3V 220U	1	
C7708		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C7709		ECUM1H300JCN	C.CAPACITOR CH 50V 30P	1	
C7710		ECEAOJKA470	E.CAPACITOR 6.3V 47U	1	
C7711		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7716		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7717		ECEAOJKA470	E.CAPACITOR 6.3V 47U	1	
D3901		MA4056M	DIODE	1	
D7701		SVC251SPA	DIODE	1	
IC3901		MC14051BF	IC	1	
IC3902		MC14052BF	IC	1	
IC7701		UPD6464CS505	IC	1	
K7701		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
K7703		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
L3901		VLQ0599J330	COIL 33UH	1	
L3902		VLQ0599J680	COIL 68UH	1	
L3903		VLQ0599J101	COIL 100UH	1	
L7701		VLQ0599J4R7	COIL 4.7UH	1	
L7702-04		VLQ0599J330	COIL 33UH	3	
P3901		VJS3537B008G	CONNECTOR (FEMALE) 8P	1	
PS3901		VJS3042B020W	CONNECTOR (FEMALE)	1	
PS3902		VJS3042B018W	CONNECTOR (FEMALE) 18P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q3901		2SB709A	TRANSISTOR	1	
R3901		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3902		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3903		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3904		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3905,06		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	2	
R3907		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3908,09		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3910-13		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	4	
R7701		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7702		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7703		ERJ6GEYJ512	M.RESISTOR CH 1/10W 5.1K	1	
S3901		ESD172253	SWITCH	1	
			MISCELLANEOUS		
		VEJ1493	I/O JACK PLATE	1	
	■	VEP04469N	MOTOR DRIVE C.B.A.		(RTL)
C2501,02		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C2503		ECA1EM470	E.CAPACITOR 25V 47U	1	
C2504		ECEA1HKNR22	E.CAPACITOR 50V 0.22U	1	
C2505		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2506		ECA1EM470	E.CAPACITOR 25V 47U	1	
C2507,08		ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U	2	
C2509		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2510		ECAOJM221	E.CAPACITOR 6.3V 220U	1	
C2511		ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U	1	
C2512		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2513		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2514-16		ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U	3	
C2517		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2518		ECUM1C474ZFN	C.CAPACITOR CH 16V 0.47U	1	
C2519		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2520		ECUM1C474ZFN	C.CAPACITOR CH 16V 0.47U	1	
C2521		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2523		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2525		ECEAOJKA470	E.CAPACITOR 6.3V 47U	1	
C2540		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C4712		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4713		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4714		ECQP1222JZ	P.CAPACITOR 100V 2200P	1	
C4715		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4716		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4732		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C4736		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4737		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C4738		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4739		ECQB1H333JZ	F.CAPACITOR 50V 0.033U	1	
D2501,02		MA185	DIODE	2	
D4702,03		MA151K	DIODE	2	
IC2501		BA6871S	IC	1	
K4707		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4711		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L2503		VLP0083	COIL	1	
L4702		ELESE471KA	COIL	1	
L4704		ELESE101KA	COIL 100UH	1	
L4705,06		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P2003		VJP3502	CONNECTOR (MALE)	1	
P2502		VJP1232T	CONNECTOR (MALE) 5P	1	
P4002		VJS2329	CONNECTOR (FEMALE)	1	
P4003		VJP1230T	CONNECTOR (MALE) 3P	1	
P6003		VJP1242T	CONNECTOR (MALE) 2P	1	
PS2501		VJS3042B018W	CONNECTOR (FEMALE) 18P	1	
PS4701		VJS3042B011W	CONNECTOR (FEMALE) 11P	1	
Q4701		2SD602A-R	TRANSISTOR	1	
Q4703		2SB1320A-R	TRANSISTOR	1	
Q4706		2SB709A-R	TRANSISTOR	1	
Q4707		2SD602A-R	TRANSISTOR	1	
QR4702,03		MUN2214	TRANSISTOR-RESISTOR	2	
R2501		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2502		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R2503,04		ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2505		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2506		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2507		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2508		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2509		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2510		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2511		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2512		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2513,14		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2515		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2516		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2517		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2518		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2519		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2520		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2521,22		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2529		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2530		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2531		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2532		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2533		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2534		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4710		ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R4715		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4723		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4735		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R4736		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4737		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4738		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
T4701		VLT0695	TRANSFORMER	1	
T4702		VLT0696	TRANSFORMER	1	
VR2006		EVNDCAA03B15	V.RESISTOR 100K	1	
VR2011		EVNDCAA03B15	V.RESISTOR 100K	1	
VR4001		EVNDCAA03B15	V.RESISTOR 100K	1	
			MISCELLANEOUS		
		VEE9091	WIRE CABLE	1	(P2003-POWER TR.)
		VEE9112	WIRE CABLE	1	(P4003-FE HEAD)
		VWJ0868	FLAT CARD CABLE	1	(P2501-CAPSTAN)
		VEE9144	WIRE CABLE	1	(P2502-CYLINDER)
	■	VEP05227A	HEAD AMP C.B.A.		(RTL)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C501		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C502,03		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C504,05		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C506,07		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C508		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C509		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C510		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C511		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C512		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C513		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C514		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C515		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C516-20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C521		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C522		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C523		VCEA0JAC221	E.CAPACITOR	1	
C524		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C525,26		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C527		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C529		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C530		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C531,32		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C533		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C534		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C535		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C536		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C537		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C538-41		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C542		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C543		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C544		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C545		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C547		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
IC501		AN3336SB	IC	1	
IC502		BA7743FS	IC	1	
L501-04		VLQ0599J680	COIL 68UH	4	
L505		VLQ0599J820	COIL 82UH	1	
L506		VLQ0599J151	COIL 150UH	1	
L507-10		VLP0145	COIL	4	
P501		VJS3537B020G	CONNECTOR (FEMALE) 20P	1	
P502		VJS2603	CONNECTOR (FEMALE)	1	
QR501		MUN2113	TRANSISTOR-RESISTOR	1	
R501		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R502		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R503-05		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	3	
R506		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R507		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R508		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R509		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R510		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R511		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R512		ERJ6GMYG752	M.RESISTOR CH 1/10W 7.5K	1	
R513		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R514		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R515		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R516		ERJ6GMYJ274	M.RESISTOR CH 1/10W 270K	1	
R517		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R518		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R519		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R520,21		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R522		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R523		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R524		VRE0034E100	M.RESISTOR CH 1/10W 10	1	
R525		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R526		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R527		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R528		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R530		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R531		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R532		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R533		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R534		ERJ6GMYJ243	M.RESISTOR CH 1/10W 24K	1	
R535		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R536		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R537		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R538		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R539		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R540		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
			MISCELLANEOUS		
		VSC3478	SHIELD COVER (MAIN)	1	
		VSC3714	SHIELD COVER (TOP)	1	
		VSC3715	SHIELD COVER (BOTTOM)	1	
	■	VEP07773D	TIMER C.B.A.		(RTL)NV-HD650A
C7501		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7502		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7507		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7508		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7509		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7510		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7511		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7513		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7514		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7515		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7516		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C7517		VCE0073	E.CAPACITOR	1	
C7519,20		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	2	
C7521		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C7522		ECEA0JKA330	E.CAPACOTOR 6.3V 33U	1	
C7524		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7525		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7526,27		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7528,29		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	2	
C7531		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7533-35		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C7536		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
D7501-08		1SS254	DIODE	8	
D7510,11		1SS254	DIODE	2	
D7516		1SS254	DIODE	1	
D7518-20		1SS254	DIODE	3	
D7526		1SS254	DIODE	1	
D7528,29		1SS254	DIODE	2	
D7531		1SS254	DIODE	1	
D7532		MA4220	DIODE	1	
D7533		MA723VT	DIODE	1	
D7541		HLMK-D215	DIODE	1	
D7542		1SS254	DIODE	1	
D7546		1SS254	DIODE	1	
D7554		1SS355	DIODE	1	
D7560		1SS355	DIODE	1	
D7564		1SS355	DIODE	1	
DP7501		VSL0336	DISPLAY TUBE	1	
IC7501		M37507V8AH	IC	1	
IC7502		M6M80041P	IC	1	
IC7504		PST7023	IC	1	
IC7505		S80743AL	IC	1	
IC7506		BA6810F	IC	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IR7501		RPM675CBRX10	IR RECEIVER UNIT	1	
K7503		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
LB7501,02		VLP0145	COIL	2	
P7501		VJS3537B032G	CONNECTOR (FEMALE) 32P	1	
P7502		VJS3537B012G	CONNECTOR (FEMALE) 12P	1	
P7503		VJS3301	CONNECTOR (FEMALE)	1	
PP7501		VJP3405A009W	CONNECTOR (MALE) 9P	1	
QR7501		MUN2112	TRANSISTOR-RESISTOR	1	
QR7502		MUN2213	TRANSISTOR-RESISTOR	1	
QR7503		MUN2211	TRANSISTOR-RESISTOR	1	
QR7505-08		MUN2113	TRANSISTOR-RESISTOR	4	
QR7509-11		MUN2111	TRANSISTOR-RESISTOR	3	
QR7512,13		MUN2112	TRANSISTOR-RESISTOR	2	
R7501-03		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	3	
R7504		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7505		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7506-11		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	6	
R7513		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	1	
R7514		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7515		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R7516		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7518		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7519		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7520,21		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7527		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R7528		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7529,30		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R7531		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7532		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7535		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	1	
R7537,38		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7539		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7540		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R7541		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7542		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R7545		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7546		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7547		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7548		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7550		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7552		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7555,56		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R7558		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7559		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
RX7501,02		EXBF6E104J	RESISTOR-RESISTOR	2	
RX7503		EXBF8E104J	COMBI.R-R 100K	1	
S7501-09		EVQ11409K	SWITCH	9	
S7510		VSQ0822	SWITCH	1	
S7512,13		EVQ11409K	SWITCH	2	
S7518		ESD170206	SWITCH	1	
VC7501		ECRHA010A54R	V.CAPACITOR	1	
VR4004		EVNCYAA03B53	V.RESISTOR 5K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
X7501		VSX0608	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJF1139	FIP HOLDER	1	
		VMD1047	LED HOLDER	1	
		VMD2035	JOG SHUTTLE HOLDER	1	
		VMD2247	IR RECEIVER HOLDER	1	
		VGU4537	SLIDE KNOB	1	
	■	VEP07773E	TIMER C.B.A.		(RTL)NV-HD650EA
C7501		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7502		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7507		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7508		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7509		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7510		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7511		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7513		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7514		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7515		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7516		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C7517		VCE0073	E.CAPACITOR	1	
C7519,20		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	2	
C7521		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C7522		ECEA0JKA330	E.CAPACOTOR 6.3V 33U	1	
C7524		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7525		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7526,27		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7528,29		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	2	
C7531		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7533,34		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7536		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7540		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
D7501-08		1SS254	DIODE	8	
D7510,11		1SS254	DIODE	2	
D7516		1SS254	DIODE	1	
D7519,20		1SS254	DIODE	2	
D7526		1SS254	DIODE	1	
D7528,29		1SS254	DIODE	2	
D7531		1SS254	DIODE	1	
D7532		MA4220	DIODE	1	
D7533		MA723VT	DIODE	1	
D7541		HLMK-D215	DIODE	1	
D7542		1SS254	DIODE	1	
D7544		1SS254	DIODE	1	
D7546		1SS254	DIODE	1	
D7554,55		1SS355	DIODE	2	
D7560		1SS355	DIODE	1	
D7564		1SS355	DIODE	1	
DP7501		VSL0336	DISPLAY TUBE	1	
IC7501		M37507V8AH	IC	1	
IC7502		M6M80041P	IC	1	
IC7504		PST7023	IC	1	
IC7505		S80743AL	IC	1	
IC7506		BA6810F	IC	1	
IR7501		RPM675CBRX10	IR RECEIVER UNIT	1	
K7503		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
LB7501,02		VLP0145	COIL	2	
P7501		VJS3537B032G	CONNECTOR (FEMALE) 32P	1	
P7502		VJS3537B012G	CONNECTOR (FEMALE) 12P	1	
P7503		VJS3301	CONNECTOR (FEMALE)	1	
PP7501		VJP3405A009W	CONNECTOR (MALE) 9P	1	
QR7502		MUN2213	TRANSISTOR-RESISTOR	1	
QR7503		MUN2211	TRANSISTOR-RESISTOR	1	
QR7505-08		MUN2113	TRANSISTOR-RESISTOR	4	
QR7509-11		MUN2111	TRANSISTOR-RESISTOR	3	
QR7512,13		MUN2112	TRANSISTOR-RESISTOR	2	
R7501-03		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	3	
R7504		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7505		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7506-11		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	6	
R7513		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	1	
R7514		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7515		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R7516		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7518		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7519		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7520,21		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7527		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R7528		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7529,30		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R7531		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7532		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7535		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	1	
R7537,38		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7539		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7540		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R7541		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7542		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R7545		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7546		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7547		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7548-50		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	3	
R7552		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7555,56		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R7558		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
RX7501,02		EXBF6E104J	RESISTOR-RESISTOR	2	
RX7503		EXBF8E104J	COMBI.R-R 100K	1	
S7501-09		EVQ11409K	SWITCH	9	
S7510		VSQ0822	SWITCH	1	
S7512,13		EVQ11409K	SWITCH	2	
S7518		ESD170206	SWITCH	1	
VC7501		ECRHA010A54R	V.CAPACITOR	1	
VR4004		EVNCYAA03B53	V.RESISTOR 5K	1	
X7501		VSX0608	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
		VJF1139	FIP HOLDER	1	
		VMD1047	LED HOLDER	1	
		VMD2035	JOG SHUTTLE HOLDER	1	
		VMD2247	IR RECEIVER HOLDER	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VGU4537	SLIDE KNOB	1	
	■	VEP06995C	OPERATION C.B.A.		(RTL)
C6501,02		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	2	
C6503		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6504		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6505		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C6506		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C6507		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C6508		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C6509		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C6510		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
D6501		1SS254	DIODE	1	
D6502		MA4051-L	DIODE	1	
D6503-07		1SS254	DIODE	5	
IC6501		M5220FP	IC	1	
JK6501		VJJ0169	JACK	1	
JK6502		VJJ0416	JACK	1	
JK6505		VJJ0263	JACK	1	
P6501		VJS3537B008G	CONNECTOR (FEMALE) 8P	1	
PS6501		VJS3405A009A	CONNECTOR (FEMALE) 9P	1	
Q6501		2SD1328	TRANSISTOR	1	
R6501		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R6502,03		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6504		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6505		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R6506		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6507		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R6508		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6509,10		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R6511		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R6512		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6513,14		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R6515,16		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	2	
S6501,02		EVQ11409K	SWITCH	2	
	■	VEP00V29A	MAIN INTERFACE C.B.A.		(RTL)
PS1501		VJS3043B003W	CONNECTOR (FEMALE) 3P	1	
PS6005		VJS3043B003W	CONNECTOR (FEMALE) 3P	1	
	■	VEP00V88A	S-TAB C.B.A.		(RTL)
PP1501		VJP3043A003W	CONNECTOR (MALE) 3P	1	
Q1501		PN205L-NC.VT	PHOTO TRANSISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
S1501		VES0695	S-TAB SW	1	
			MISCELLANEOUS		
		VMD1927	PHOTO TRANSISTOR HOLDER	1	
	■	VEX0129	CYLINDER DRIVE C.B.A.		(RTL)
C2901-03		ECEA1VSN2R2	E.CAPACITOR 35V 2.2U	3	
C2904-06		ECUM1E104KBM	C.CAPACITOR CH 25V 0.1U	3	
C2907		ECUM1E683KBM	C.CAPACITOR CH 25V 0.068U	1	
C2908		ECUM1E473KBM	C.CAPACITOR CH 25V 0.047U	1	
C2910		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
IC2901		AN3814K	IC	1	
P2901		VJP2603W	CONNECTOR (MALE)	1	
P2902		VJP1232T	CONNECTOR (MALE) 5P	1	
R2901		ERX12SJR68	M.RESISTOR CH 1/2W 0.68	1	
			MISCELLANEOUS		
		VMA9138	MAIN HOLDER	1	
	■	---------	MOTOR C.B.A.		
			MISCELLANEOUS		
		VJP3316B002	CONNECTOR 2P	1	

INTERNAL REFERENCE CODES

NOTE: This chart is only for internal reference.
Do not order any parts according to these codes.

P. C. B.	FILM CODE
MAIN SYUGO	H0A002-0317A
LUMINANNCE & CHROMINANCE	H0A000-03D27
SQ PB	H0A000-03A03
HIFI AUDIO	H0A000-04447
INPUT/OUTPUT	H0A000-03B27
TIMER SYUGO	H0A001-0318A
TV DEMODULATOR	H0A000-07801
DECODER(A)	H0A000-07784
NICAM DECODER(EA)	H0A000-07787
MOTOR DRIVE	H0A001-04469
HEAD AMP	H0A000-05227
CYLINDER DRIVE	H0A000-00X69
LOADING MOTOR	H0A000-00S75

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